Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

001

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. UTU-65404

	UTE TRIBAL	
7.	If Unit or CA Agreement,	Name and No.

6. If Indian, Allottee or Tribe Name

la. Type of Work: ☑ DRILL ☐ REENTER	7. If Unit or CA Agreement, Name and No. GLEN BENCH			
1b. Type of Well: ⊠ Oil Well ☐ Gas Well ☐ Oth	er Single Zone	8. Lease Name and Well No. OU GB 1G-19-8-22	3 + 4	
	JOHN BUSCH E-Mail: jbusch@shenandoahenergy.com	9. API Well No. 43-047-34446		
3a. Address 11002 E. 17500 S. VERNAL, UT 84078	3b. Phone No. (include area code) Ph: 435.781.4341 Fx: 435.781.4323	10. Field and Pool, or Exploratory NATURAL BUTTES		
Location of Well (Report location clearly and in accordance NENE Lot 5 802FNL 692FB At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 19 T8S R22E Mer SLB			
14. Distance in miles and direction from nearest town or post of 14 +/- MILES FROM OURAY, UTAH	12. County or Parish UINTAH	13. State UT		
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 692' +/-	17. Spacing Unit dedicated to this v	well		
 Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 25' +/- 	20. BLM/BIA Bond No. on file U-0969			
21. Elevations (Show whether DF, KB, RT, GL, etc. 4833 KB	22. Approximate date work will start	23. Estimated duration 10 DAYS		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
 A Drilling Plan.
 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	New C (Buffed/Typed)	Date 08/05/2002
John Burd	THIN BUSCH	00/03/2002
OPERATIONS A		
Approved by (Signapure)	Name (Printed/Typed)	Date
Approved of (signature)	BRADLEY G. HILL	Date 08-14-02
Title	Office RECLAMATION SPECIALIST III	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

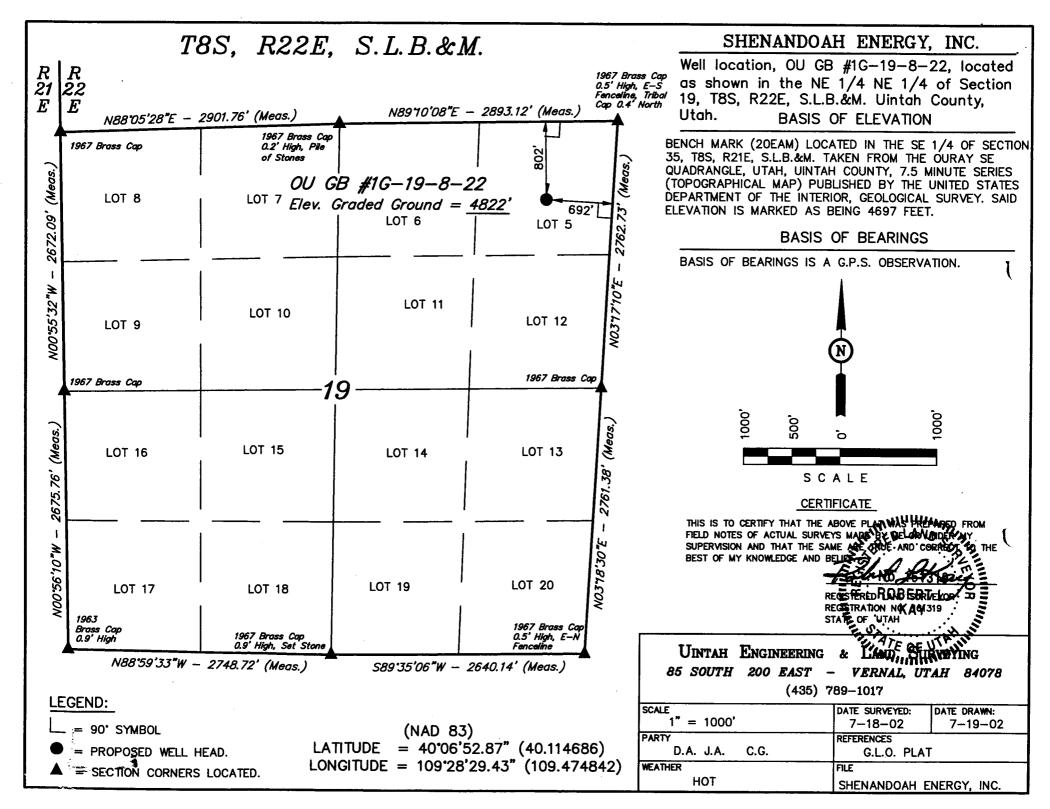
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #13327 verified by the BLM Well Information System For SHENANDOAH ENERGY INC., sent to the Vernal

HECEIVED

ALG U 7 2002



SHENANDOAH ENERGY INC. OU GB 1G-19-8-22

ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. Formation Tops

The estimated tops of important geologic markers are as follows:

Formation	Depth
Uinta	Surface
Green River	2452
Mahogany Ledge	3355
Mesa	4911
TD (Wasatch)	5125

2. Anticipated Depths of Oil, Gas, Water and Other Mineral Bearing Zones

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil/Gas	Green River	5125

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

All water shows and water-bearing sands will be reported to the BLM in Vernal, Utah. Copies of State of Utah form OGC-8-X are acceptable. If no flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

3. Anticipated Bottom Hole Pressures

Maximum anticipated bottom hole pressure equals approximately 2050.0 psi.

SHENANDOAH ENERGY INC. OVER AND UNDER GLEN BENCH 1G-19-8-22 802' FNL, 692' FEL NENE, 19, T8S, R22E, LOT #5 UINTAH COUNTY, UTAH LEASE # UTU-65404

ONSHORE ORDER NO. 1

MULTI - POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

The proposed well site is approximately 14 miles from Ouray, Utah.

Refer to Topo Maps A and B for location of access roads within a 2 - mile radius.

There will be no improvements made to existing access roads.

2. Planned Access Roads:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Refer to Topo Map B for the location of the proposed access road.

3. Location of Existing Wells Within a 1 – Mile Radius:

Please refer to Topo Map C.

4. Location of Existing & Proposed Facilities:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

Refer to Topo Map D for the location of the proposed pipeline.

5. Location and Type of Water Supply:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

6. Source of Construction Materials:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

7. Methods of Handling Waste Materials:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

8. Ancillary Facilities:

Please see Shenandoah Energy Inc. Standard Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 to 24 East.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Please refer to OU GB 1W-19-8-22.

10. Plans for Reclamation of the Surface:

Please see Shenandoah energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Township 07 and 08 South, Ranges 21 to 24 East.

Please refer to the OU GB 1W-19-8-22.

11. Surface Ownership:

The well pad and access road are located on lands owned by:

Ute Tribe PO Box 190 Ft. Duchesne,Ut. 84026

12. Other Information

A Class III archaeological survey was conducted by Montgomery Archaeology Consultants. A copy of this report was submitted directly to the appropriate agencies by Montgomery Archaeology Consultants. Cultural resource clearance was recommended for this location.

Lessee's or Operator's Representative:

John Busch Red Wash Operations Rep. Shenandoah Energy Inc. 11002 East 17500 South Vernal, Utah 84078 (435) 781-4341

Certification:

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil & Gas Orders, the approved plan of operations, and any applicable Notice to Lessees.

Shenandoah Energy Inc. will be fully responsible for the actions of their subcontractors.

A complete copy of the approved Application for Permit to Drill will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Shenandoah Energy Inc. its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

-lot- Busch	05-Aug-01
John Busch	Date
Red Wash Operations Representative	

Additional Operator Remarks:

Shenandoah Energy Inc. proposes to drill a well to 5125' to test the Green River. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 and 24 East.

See Onshore Order No. 1 attached

Please be advised that Shenandoah Energy Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No. U-0969. The principal is Shenandoah Energy Inc. via surety as consent as provided for the 43 CFR 3104.2.

SHENANDOAH ENERGY INC.

OU GB #1G-19-8-22

LOCATED IN UINTAH COUNTY, UTAH **SECTION 19, T8S, R22E, S.L.B.&M.**

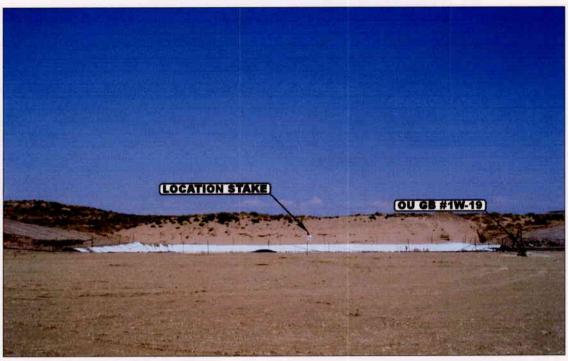


PHOTO: VIEW OF WELL LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW OF EXISTING ACCESS

CAMERA ANGLE: NORTHEASTERLY



Uintah Engineering & Land Surveying

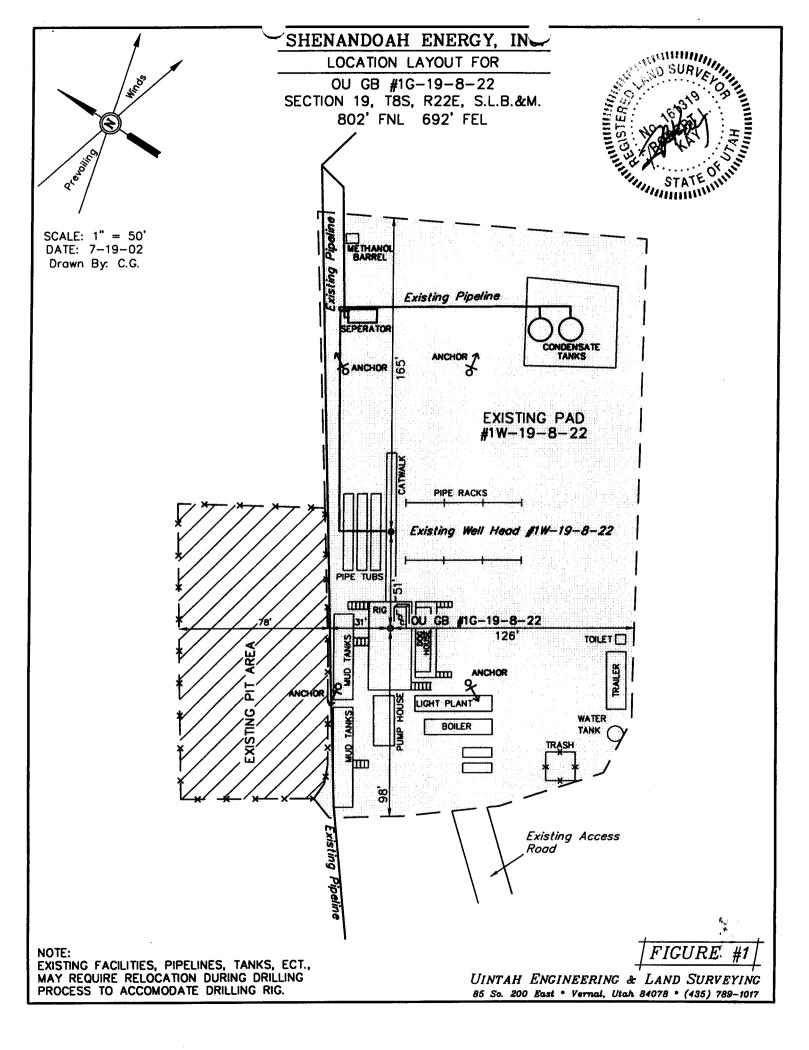
S South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

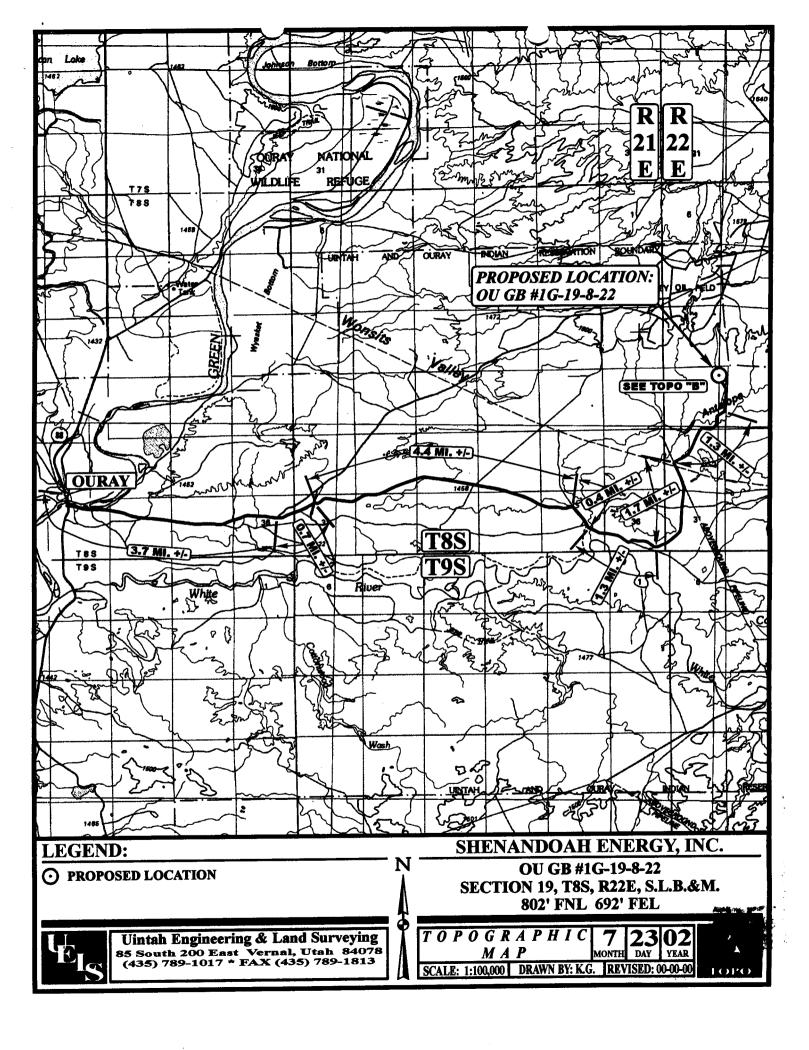
LOCATION PHOTOS

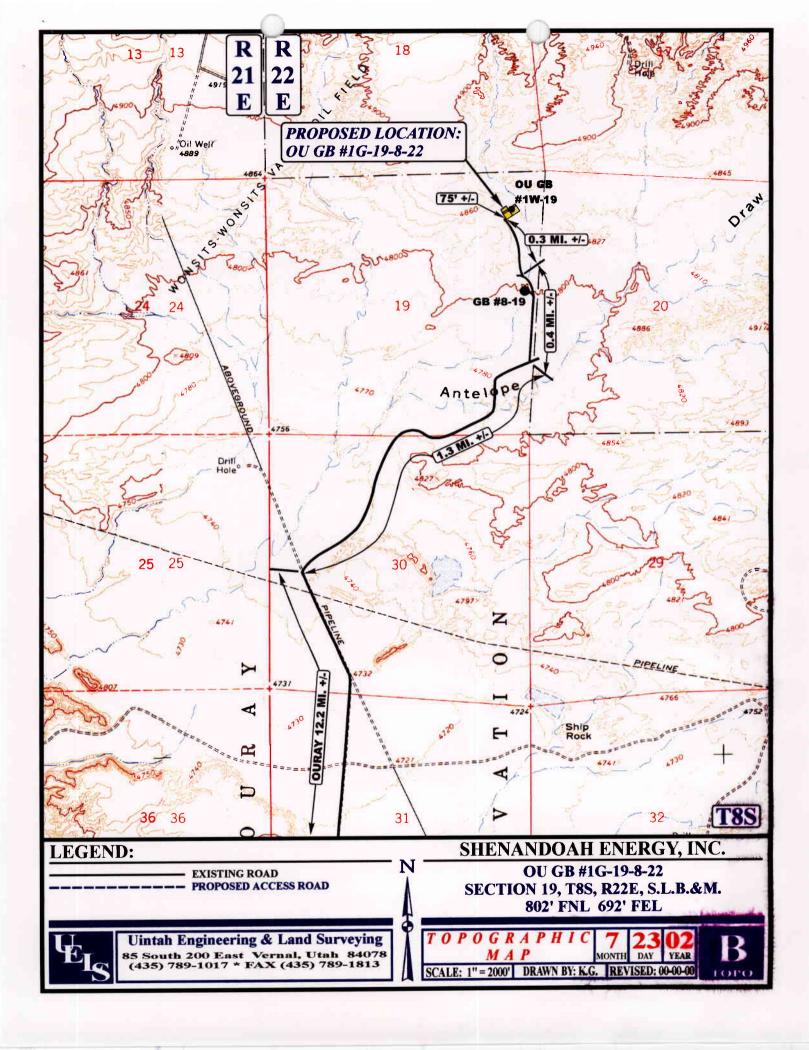
MONTH DAY YEAR

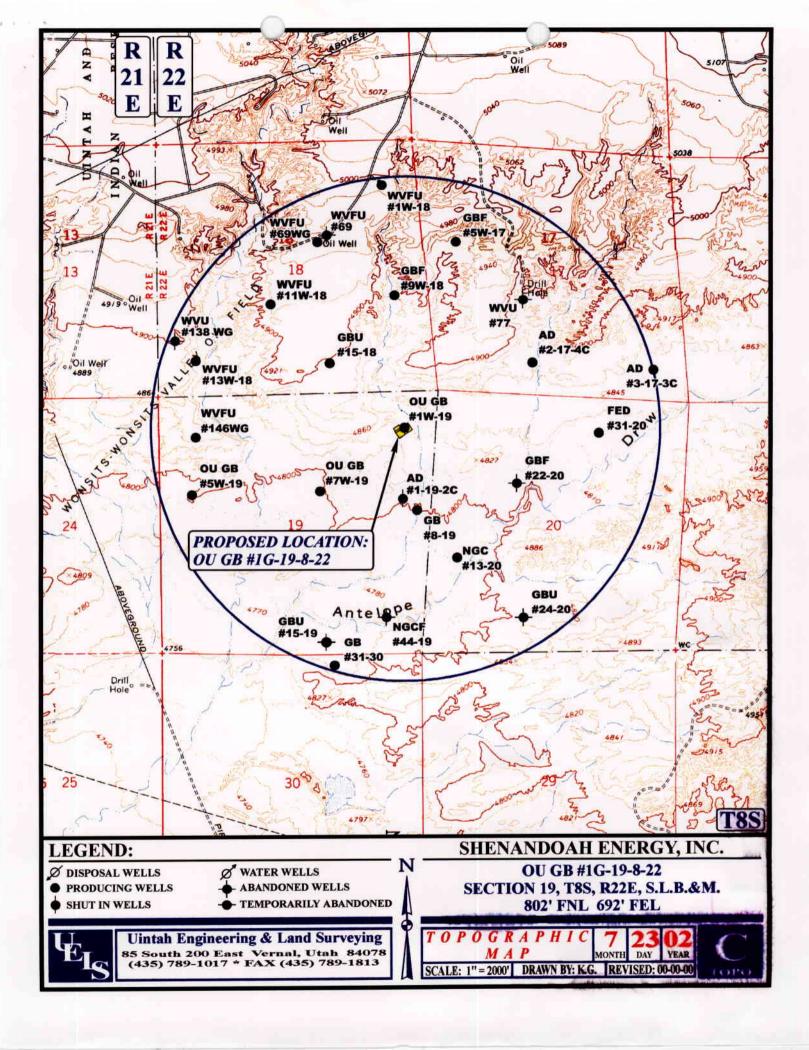
РНОТО

TAKEN BY: D.A. DRAWN BY: K.G. REVISED: 00-00-00



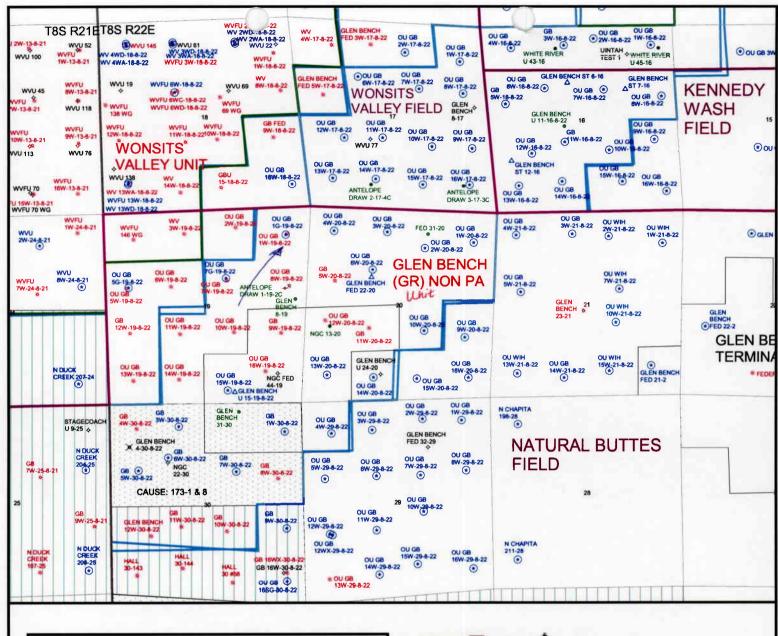






WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 08/08/2002	API NO. ASSIGN	ED: 43-047-3469	96
WELL NAME: OU GB 1G-19-8-22 OPERATOR: SHENANDOAH ENERGY INC (N4235) CONTACT: JOHN BUSCH PROPOSED LOCATION:	PHONE NUMBER: 4		
NENE 19 080S 220E SURFACE: 0802 FNL 0692 FEL BOTTOM: 0802 FNL 0692 FEL UINTAH NATURAL BUTTES (630) LEASE TYPE: 1 - Federal LEASE NUMBER: UTU-65404 SURFACE OWNER: 2 - Indian PROPOSED FORMATION: GRRV	Tech Review Engineering Geology Surface LATITUDE: 40.1 LONGITUDE: 109.	*	Date
Plat Bond: Fed[1] Ind[] Sta[] Fee[] (No. U-0969) Potash (Y/N) N Oil Shale 190-5 (B) or 190-3 or 190-13 Water Permit (No. 43-8496) N RDCC Review (Y/N) (Date:) Fee Surf Agreement (Y/N)	R649-3-3. Drilling Un Board Cause Eff Date: Siting:	General From Qtr/Qtr & 920' Exception it e No:	Between Wells
STIPULATIONS: 1-federal approval 2-Spacing Stip			



OPERATOR: SHENANDOAH ENERGY(4235)

T8S R₂2E SEC: 19 FIELD: NATURAL BUTTES (630)

COUNTY: UINTAH

WATER DISPOSAL

SPACING: GEN ST / R649-3-2



Utah Oil Gas and Mining

Units Status Well Status Field Status GAS INJECTION **EXPLORATORY ABANDONED** GAS STORAGE **GAS STORAGE ACTIVE** LOCATION ABANDONED NF PP OIL COMBINED **NEW LOCATION** NF SECONDARY PLUGGED & ABANDONED **INACTIVE PENDING** PRODUCING GAS **PROPOSED** PRODUCING OIL PI OIL STORAGE SHUT-IN GAS PP GAS SHUT-IN OIL **TERMINATED** PP GEOTHERML TEMP. ABANDONED Sections.shp PP OIL **TEST WELL** Township.shp WATER INJECTION Prepared By: D. Mason SECONDARY Counties.shp WATER SUPPLY Date: 9-AUGUST-2002

TERMINATED



State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor

Robert L. Morgan Executive Director Lowell P. Braxton

Division Director

1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 (801) 538-5340 telephone (801) 359-3940 fax (801) 538-7223 TTY

www.nr.utah.gov

August 14, 2002

Shenandoah Energy Inc 11002 E 17500 S Vernal, UT 84078

Re: Over and Under Glen Bench 1G-19-8-22 Well, 802' FNL, 692' FEL, NE NE, Sec. 19,

T. 8 South, R. 22 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-34696.

Sincerely,

John R. Baza

Associate Director

er

Enclosures

cc.

Uintah County Assessor

Bureau of Land Management, Vernal District Office



Operator:	Shenandoah Energy Inc		
Well Name & Number	Over and Under Glen Bench 1G-19-8-22		
API Number:	43-047-34696		
Lease:	UTU-65404		

Conditions of Approval

T. 8 South

R. 22 East

1. General

Location: NE NE

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Sec. 19

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Form 3160-3 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

009

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. UTU65404

6. If Indian, Allottee or Tribe Name

la. Type of Work: 🗷 DRILL 🔲 REENTER	CONFIDENTIAL	7. If Unit or CA Agreement, Name UTU73974X	and No.
1b. Type of Well:	ner Single Zone	8. Lease Name and Well No. OU GB 1G-19-8-22	
	JOHN BUSCH E-Mail: john.busch@questar.com	9. API Well No. 43-047-3	4696-00-X1
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078-8526	3b. Phone No. (include area code) Ph: 435.781.4341 Fx: 435.781.4323	10. Field and Pool, or Exploratory GLEN BENCH	
4. Location of Well (Report location clearly and in accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Blk. and Sur	vey or Area
At surface Lot 5 802FNL 692FEL		Sec 19 T8S R22E Mer SLE	3
At proposed prod. zone			
14. Distance in miles and direction from nearest town or post 14 +/- MILES FROM OURAY, UTAH	office*	12. County or Parish UINTAH	13. State UT
15. Distance from proposed location to nearest property or	16. No. of Acres in Lease	17. Spacing Unit dedicated to this w	/ell
lease line, ft. (Also to nearest drig. unit line, if any) 692' +/-	132.99	40.00	
18. Distance from proposed location to nearest well, drilling,	19. Proposed Depth	20. BLM/BIA Bond No. on file	
completed, applied for, on this lease, ft. 25' +/-	5125 MD 5125 TVD	UT1237	
21. Elevations (Show whether DF, KB, RT, GL, etc. 4833 KB	22. Approximate date work will start	23. Estimated duration 10 DAYS	
	04 44 1		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) JOHN BUSCH	08/05/2002
Title OPERATIONS		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) ED FORSMAN	Date 10/29/2002
Title ACTING AFM FOR MINERAL RESOURCES	Office Vernal	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #13327 verified by the BLM Well Information System For SHENANDOAH ENERGY INC, sent to the Vernal Committed to AFMSS for processing by PAT SUTTON on 08/08/2002 (02PS0423AE)

OCT 2 9 2002

mail DIVISION OF

OIL, GAS AND NEWISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED **

Additional Operator Remarks:

Shenandoah Energy Inc. proposes to drill a well to 5125' to test the Green River. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

Please see Shenandoah Energy Inc. Standard Operating Practices for Green River Formation Wells located in Red Wash, Wonsits Valley, Gypsum Hills, White River, Glen Bench, and undesignated fields in Townships 07 and 08 South, Ranges 21 and 24 East.

See Onshore Order No. 1 attached

Please be advised that Shenandoah Energy Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Bond No. U-0969. The principal is Shenandoah Energy Inc. via surety as consent as provided for the 43 CFR 3104.2.

Revisions to Operator-Submitted EC Data for APD #13327

Operator Submitted

Agreement:

Lease:

UTU-65404 **GLEN BENCH**

Operator:

SHENANDOAH ENERGY INC.

11002 E. 17500 S. VERNAL, UT 84078 Ph: 435.781.4341 Fx: 435.781.4323

Admin Contact:

JOHN BUSCH OPERATIONS 11002 E. 17500 S. VERNAL, UT 84078 Ph: 435.781.4341 Fx: 435.781.4323

E-Mail: jbusch@shenandoahenergy.com

Tech Contact:

Well Name: Number:

OU GB 1G-19-8-22

Location:

State:

County: S/T/R: Surf Loc: UINTAH Sec 19 T8S R22E Mer SLB NENE Lot 5 802FNL 692FEL

Field/Pool:

NATURAL BUTTES

Bond:

U-0969

BLM Revised (AFMSS)

UTU65404

UTU73974X

SHENANDOAH ENERGY INC

11002 EAST 17500 SOUTH VERNAL, UT 84078-8526 Ph: 435.781.4300 Fx: 435.781.4329

JOHN BUSCH OPERATIONS 11002 EAST 17500 SOUTH VERNAL, UT 84078-8526 Ph: 435.781.4341 Fx: 435.781.4323

E-Mail: john.busch@questar.com

OU GB 1G-19-8-22

UT UINTAH Sec 19 T8S R22E Mer SLB Lot 5 802FNL 692FEL

GLEN BENCH

UT1237

COAs Page 1 of 4 Well No.: OU GB 1G-19-8-22

CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator:	Shenandoah Energy, Inc.				
Well Name & Number:	OU GB #1G-19-8-22				
API Number:	43-047-34696				
Lease Number:	U - 65404				
Location: Lot 5 Se	ec. <u>19</u> T. <u>8S</u> R. <u>22E</u>				
Agreement:	Glen Bench (GR) SR				

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

Well No.: OU GB 1G-19-8-22

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease that would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

Casing Program and Auxiliary Equipment

As a minimum requirement, the cement behind the production casing must extend 200' above the top of the fresh water identified at ± 1832 '.

Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

Please submit to this office, in LAS format, an electronic copy of all logs run on this well. This submission will replace the requirement for submittal of paper logs to the BLM.

Other Information

In the event after-hours approvals are necessary, you must contact one of the following individuals:

Ed Forsman

(435) 828-7874

Petroleum Engineer

Kirk Fleetwood

(435) 828-7875

Petroleum Engineer

BLM FAX Machine (435) 781-4410

Well No.: OU GB 1G-19-8-22

SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

Shenandoah Energy, Inc. (Shenandoah) will assure the Ute Tribe that any/all contractors and subcontractors have acquired a current Tribal Business License and have updated "Access Permits" prior to construction. All Shenandoah personnel, contractors and subcontractors will have these permits in their vehicles at all times. Companies that have not complied with this COA will be in violation of the Ute Tribal Business License Ordinance, and will be subject to fines and penalties.

Shenandoah employees, representatives, and/or authorized personnel (subcontractors) shall not carry firearms on their person or in their vehicles while working on the Uintah & Ouray Indian Reservation.

Shenandoah employees and/or authorized personnel (subcontractors) in the field will have approved applicable APDs and/or ROW permits/authorizations on their person(s) during all phases of construction.

Shenandoah will notify the Ute Tribe and Bureau of Indian Affairs (BIA) in writing of any requested modification of APDs or Rights-Of-Way (ROW). Shenandoah shall receive written notification of authorization or denial of the requested modification. Without authorization, Shenandoah will be subject to fines and penalties.

The Ute Tribe Energy & Minerals Department shall be notified in writing 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday. A Tribal Technician is to routinely monitor construction. Shenandoah shall make arrangements with the Ute Energy & Minerals Department for all monitoring that will exceed regular working hours for Tribal Technicians. A qualified Archaeologist accompanied by a Tribal Technician will monitor any trenching construction of the pipeline. Shenandoah is to inform contractors to maintain construction of the pipelines within the approved ROW.

A corridor ROW, 30 feet wide and 1207 feet long, was granted for the access road for the existing well 1W-19-8-22. The pipeline for this well will be placed in that corridor and the same new access road that serves that well will also be used for access to well 1G-19-8-22.

Upon completion of the pertinent APD and ROWs, Shenandoah will notify the Ute Tribe Energy & Minerals Department for a Tribal Technician to verify the Affidavit of Completion. When each pipeline has been constructed and completed as built descriptions will be filed with the Ute Tribal Energy & Minerals Department.

Production waters, oil, and other byproducts shall not be placed on access roads or the well pad.

Well No.: OU GB 1G-19-8-22

All vehicular traffic, personnel movement, construction and restoration operations will be confined to the areas examined and approved and to the existing roadways and/or evaluated access routes.

Shenandoah will implement "Safety and Emergency Plan" and ensure plan compliance.

Shenandoah shall stop construction activities and notify personnel from the Ute Tribe Energy & Minerals Department and BIA if cultural remains including paleontologic resources (vertebrate fossils) are exposed or identified during construction. The Ute Tribe Department of Cultural Rights and Protection and the BIA will provide mitigation measures prior to allowing construction.

Shenandoah employees and/or authorized personnel (subcontractors) will not be allowed to collect artifacts and paleontologic fossils. No significant cultural resources shall be disturbed.

Shenandoah will control noxious weeds on the well site and ROWs. Shenandoah will be responsible for noxious weed control if weeds spread from the project area onto adjoining land.

Reserve pits will be lined with an impervious synthetic liner to conserve fluids. A fence will be constructed around the reserve pit until it is backfilled. Prior to backfilling the reserve pit, all fluids will be pumped from the pit into trucks and hauled to approved disposal sites. When the reserve pits are backfilled, the surplus oil and mud, etc., will be buried a minimum of 3 feet below the surface of the soil.

A closed system will be used during production. This means that production fluids will be contained in leak-proof tanks. All production fluids will be disposed of at approved disposal sites.

Surface pipelines will be constructed to lie on the soil surface. The pipeline ROW will not be bladed or cleared of vegetation without authorization of the BIA. Surface pipelines shall be welded in place at well sites or on access roads and on other existing roads then pulled into place with suitable equipment. Vehicles shall not use pipeline ROWs as access roads unless specifically authorized.

Before the site is abandoned, Shenandoah will be required to restore the well site and ROWs to near their original state. The disturbed areas will be reseeded with desirable perennial vegetation.

Reseeding all disturbed areas will mitigate soil erosion.

OPERATOR CHANGE WORKSHEET

1. GLH 2. CDW 3. FILE

013

Change of Operator (Well Sold)

Designation of Agent/Operator

X Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective: FROM: (Old Operator):			e:	2/1/2003]
			TO: (New Operator):]	
N4235-Shenandoah Energy Inc			N2460-QEP I		Inc			Ì	
11002 E 17500 S				11002 E 17500 S					
Vernal, UT 84078-8526				•	il, UT 84078		•		
Phone: (435) 781-4341				Phone:	(435) 781-	4341			
CA No) .			Unit:	· · · · · · · · · · · · · · · · · · ·				
WELL(S)		,		T		· · · · · · · · · · · · · · · · · · ·			L
NAME	SEC	TWN	RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	Cor
BRENNAN BOTTOM UNIT	-		 					 	T
BRENNAN BOTTOM 1HG-18-7-21	18	070S	210E	4304734565		Federal	OW	APD	С
GLEN BENCH UNIT									\vdash
OU GB 1G-19-8-22	19	080S	220E	4304734696	13727	Federal	OW	DRL	C
STIRRUP UNIT									F
STIRRUP U 8W-34-7-21	34	070S	210E	4304734707		Federal	GW	APD	C
			•		•				$oxed{\pm}$
									\perp
OPERATOR CHANGES DOCUMENTATION Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation was recommended.		from the	e FOR	MER operato	r on:	6/2/2003	3_		
2. (R649-8-10) Sundry or legal documentation was rec	eived	from the	e NEV	V operator on:	6/2/2003	_			
3. The new company was checked on the Department	of Co	mmerc	e, Divi	sion of Corpo	orations Da	tabase on	ı :	6/19/2003	<u>; </u>
4. Is the new operator registered in the State of Utah:			YES	Business Nun	nber: 5	292864-0	151		
5. If NO, the operator was contacted contacted on:									

6. (R649-9-2)Waste Management Plan has been received on:	IN PLACE	-
7.	Federal and Indian Lease Wells: The BLM and or the BIA had or operator change for all wells listed on Federal or Indian leases on:	nas approved 7/21/2003	I the merger, name change,
8.	Federal and Indian Units:	4 1	7/21/2002
	The BLM or BIA has approved the successor of unit operator for wells	s listed on:	7/21/2003
9.	Federal and Indian Communization Agreements ("CA" The BLM or BIA has approved the operator for all wells listed within		n/a
10	Underground Injection Control ("UIC") The Division for the enhanced/secondary recovery unit/project for the water disposal		UIC Form 5, Transfer of Authority to Inject, on: n/a
DA	ATA ENTRY:		
1.	Changes entered in the Oil and Gas Database on:	9/11/2003	<u>-</u>
2.	Changes have been entered on the Monthly Operator Change Spread	Sheet on:	9/11/2003
3.	Bond information entered in RBDMS on:	n/a	-
4.	Fee wells attached to bond in RBDMS on:	n/a	- -
ST	ATE WELL(S) BOND VERIFICATION:		
1.	State well(s) covered by Bond Number:	965-003-032	-
FF	DERAL WELL(S) BOND VERIFICATION:		1. 3.
1.	Federal well(s) covered by Bond Number:	ESB000024	· -
IN	DIAN WELL(S) BOND VERIFICATION:		
1.	Indian well(s) covered by Bond Number:	799446	-
	CE WELL(S) BOND VERIFICATION: (R649-3-1) The NEW operator of any fee well(s) listed covered by Bon	d Number	965-003-033
	The FORMER operator has requested a release of liability from their bo		n/a
	The Division sent response by letter on:	n/a	-
3.	CASE INTEREST OWNER NOTIFICATION: (R649-2-10) The FORMER operator of the fee wells has been contacted of their responsibility to notify all interest owners of this change on:	and informed n/a	by a letter from the Division
CC	DMMENTS:		
_			
_			

Form 3160-5 (August 1999)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

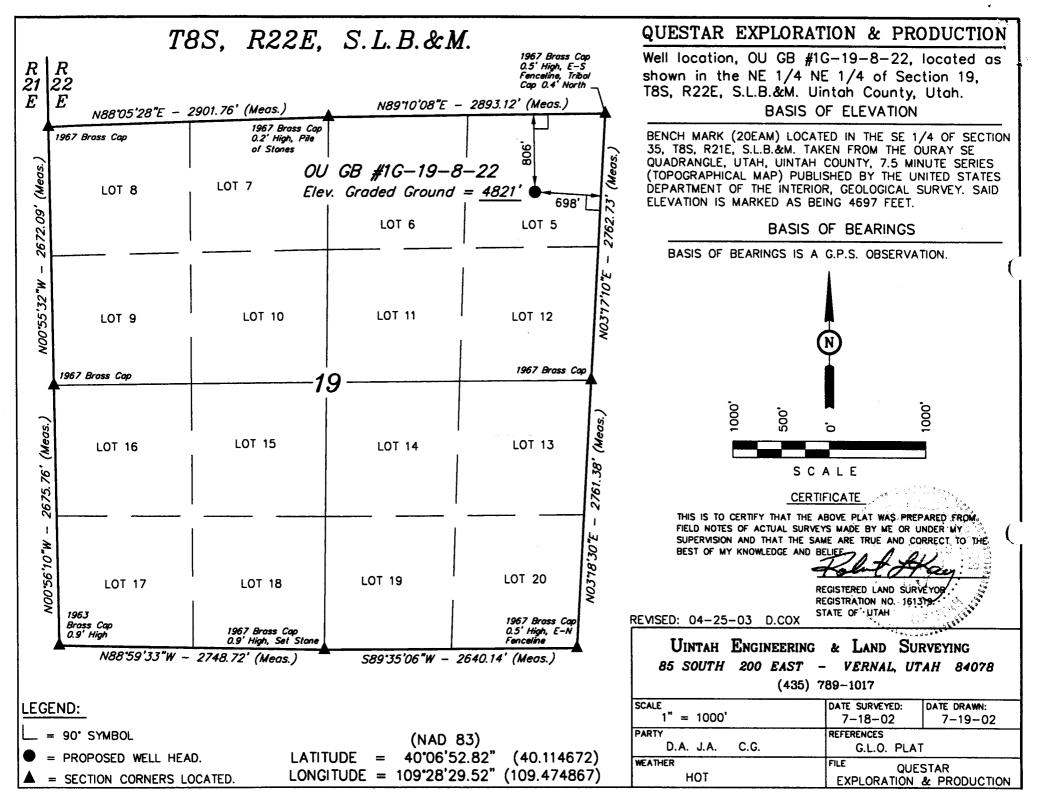
FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 200

00

5. Lease Serial No.

SUNDRY NOTICES AND REPORTS ON WELLS					U1U-65404		
Do not use thi abandoned wel	Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.						
SUBMIT IN TRII	7. If Unit or CA/Agreement, Name and/or No.						
Type of Well Gas Well ☐ Oth	8. Well Name and No. OU GB 1G-19-8-22						
Name of Operator SHENANDOAH ENERGY INC	Contact:	RALEEN SEA E-Mail: raleen.s	ARLE searle@questar.c	om	9. API Well No. 43-047-34696		
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078)	10. Field and Pool, or I NATURAL BUT					
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description,)			11. County or Parish, a	and State	
Sec 19 T8S R22E NENE 802F	FNL 692FEL				UINTAH COUNT	ry, ut	
12. CHECK APPR	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF	NOTICE, RI	EPORT, OR OTHER	R DATA	
TYPE OF SUBMISSION			TYPE O	F ACTION	,,, , , , , , , , , , , , , , , , , , 		
Notice of Intent ■	☐ Acidize	☐ Deep	oen	□ Product	ion (Start/Resume)	■ Water Shut-Off	
_	☐ Alter Casing	☐ Frac	ture Treat	☐ Reclam	ation	☐ Well Integrity	
☐ Subsequent Report	□ Casing Repair	□ New	Construction	□ Recomp	olete	Other	
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	and Abandon	☐ Tempor	arily Abandon		
	☐ Convert to Injection	☐ Plug	Back	☐ Water I	Disposal		
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) Shenandoah Energy Inc. has moved this well spot eight feet due to the rig layout. The new footages for this well is 806' FNL, 698' FEL. 40.11972 Approved by the Utah Division of Oil, Gas and Mining Oil, Gas and Mining Date: Da							
14. I hereby certify that the foregoing is	Electronic Submission #	21585 verified DOAH ENERG	Y INC., sent to	the Vernal			
Name(Printed/Typed) RALEEN	Title REGU	LATORY AF	FAIRS ANALYST				
Signature RallM							
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE ,		
Approved By			Title		Date		
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conductive the	uitable title to those rights in the	not warrant or e subject lease	Office				
e 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United							

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Form 3160-5 (Augus 2-999)	TELLICIA I LEC					APPROVED O. 1004-0135 ovember 30, 2000	
005	abandoned well	. Use form 3160-3 (APD) for such proposals.		6. If Indian, Allottee of UTE TRIBE	or Tribe Name	
	SUBMIT IN TRIF	PLICATE - Other instruct	ions on reverse side.		7. If Unit or CA/Agre	ement, Name and/or No.	
_	Gas Well Oth		CONFIDENT	TAL	8. Well Name and No. OU GB 1G 19-8-2		
2. Name of Operat	or S <i>HENAN</i> BASIN DIVISION	OOAH Contact: [ENERGY INC	DAHN F. CALDWELL E-Mail: Dahn.Caldwell@questar.	com	9. API Well No. 43-047-34696		
3a. Address 11002 E. 175 VERNAL, UT			3b. Phone No. (include area code) Ph: 435.781.4342 Fx: 435.781.4357		10. Field and Pool, or NATURAL BUT		
4. Location of We	Il (Footage, Sec., T.	R., M., or Survey Description)			11. County or Parish,	and State	
Sec 19 T8S	R22E NENE 802F	NL 692FEL			UINTAH COUNTY, UT		
12	2. CHECK APPR	OPRIATE BOX(ES) TO	INDICATE NATURE OF 1	NOTICE, R	EPORT, OR OTHE	R DATA	
TYPE OF SU	JBMISSION		TYPE OI	ACTION			
		□ Acidize	☐ Deepen	Product	tion (Start/Resume)	☐ Water Shut-Off	
Notice of li	itent	☐ Alter Casing	☐ Fracture Treat	☐ Reclam	ation	☐ Well Integrity	
Subsequent	Report	☐ Casing Repair	■ New Construction	☐ Recom	plete	Other	
☐ Final Aban	donment Notice	☐ Change Plans	□ Plug and Abandon	☐ Tempor	orarily Abandon Well Spud		
		☐ Convert to Injection	☐ Plug Back	☐ Water I	Disposal		
If the proposal in Attach the Bond following computesting has been determined that	is to deepen directional under which the wor letion of the involved completed. Final Ab the site is ready for fi	lly or recomplete horizontally, g k will be performed or provide to operations. If the operation res andonment Notices shall be file nal inspection.)	t details, including estimated startingive subsurface locations and measuche Bond No. on file with BLM/BIA ults in a multiple completion or record only after all requirements, including the completion of the conference of the co	red and true vo Required su completion in a ing reclamatio	ertical depths of all perting bsequent reports shall be new interval, a Form 316	nent markers and zones. filed within 30 days 60-4 shall be filed once	

14. I hereby certify that the foregoing is true and correct. Electronic Submission #21688 verified For QEP UINTA BASIN DIV	by the ISION,	BLM Well Information Syste sent to the Vernal	m
Name (Printed Typed) DAHN F. CALDWELL	Title	AUTHORIZED REPRESE	ENTATIVE
Signature Submission addition	Date	05/12/2003	
THIS SPACE FOR FEDERA	L OR	STATE OFFICE USE	BECEIVED
Approved By	Ti	tle	Day 1 5 2003
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	01	ffice	DIV. OF OIL, GAS & MINING
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any pe States any false, fictitious or fraudulent statements or representations as to any matter wi	rson kn thin its	owingly and willfully to make to a jurisdiction.	ny department or agency of the United

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **



\$\begin{align*} \begin{align*} \begin{align*} \begin{align*} 7 \\ \text{State of Utah} \\ \text{Division of Oil, Gas and Mining} \end{align*}

ENTITY ACTION FORM - FORM 6

OPERATOR ACCT. No. N-4235

OPERATOR: ADDRESS:

Shenandoah Energy, Inc. 11002 East 17500 South

Vernal, Utah 84078-8526

(435)781-4300

RC **API Number** Well Name QQ SC TP County Spud Date **Effective Date** Action Current **New Entity** No. Code **Entity** No. 43-047-34696 OU GB 1G 19 8 22 **NENE** 19 88 22E **Uintah** 5/06/03 5/15/03 WELL 1 COMMENTS: Field Green Rivers

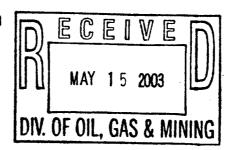
New well to be drilled in Natural Buttes (Glen Bench) - Wasatch. Corrected 5/20/03 WELL 2 COMMENTS: **WELL 3 COMMENTS: WELL 4 COMMENTS:** WELL 5 COMMENTS:

ACTION CODES (See instructions on back of form)

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected

(3/89)



Signature

Clerk Specialist 5/12/03
Title Date

Phone No. <u>(435) 781-4342</u>



Form 3160-5 (August 1999)

Signature

Approved By

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease

which would entitle the applicant to conduct operations thereon.

008

TITED STATES DEPARTMENT OF THE INTERIOR FORM APPROVED OMB NO. 1004-0135 Expires: November 30, 2000

5. Lease Serial No. UTU-65404

BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals

6.	If Indian, Allottee or Tribe Name UTE TRIBE
7	If Unit or CA/Agreement Name and/or No.

abandoned wen. Ose form 5700-5 (A. D.) for other proposition					UTE TRIBE		
SUBMIT IN TRIF	PLICATE - Other instruc	tions on reve	Prse side. コロルコール	1	7. If Unit or CA/Agre N/A	ement, Name and/or No.	
I. Type of Well	8. Well Name and No.						
🖸 Oil Well 🔲 Gas Well 🔲 Oth	b-11	OU GB 1G 19-8-2					
2. Name of Operator SHENANDO QEP UINTA BASIN DIVISION	OAH ENERCCONTACT: FNC	DAHN F. CAL E-Mail: Dahn.C		ar.com	9. API Well No. 43-047-34696		
3a. Address 11002 E. 17500 S. VERNAL, UT 84078		3b. Phone No. (include area code) Ph: 435.781.4342 Fx: 435.781.4357			10. Field and Pool, or NATURAL BUT		
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description	1)			11. County or Parish,	and State	
Sec 19 T8S R22E NENE 892 F % (2)	FNL 602 FEL & FNL, 698	'FEL			UINTAH COUN	TY, UT	
12. CHECK APPR	OPRIATE BOX(ES) To	O INDICATE	NATURE O	F NOTICE, RI	EPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			ТҮРЕ	OF ACTION			
	☐ Acidize	☐ Deep	en	☐ Product	ion (Start/Resume)	☐ Water Shut-Off	
☐ Notice of Intent	☐ Alter Casing	Frac	ture Treat	☐ Reclam	ation	■ Well Integrity	
Subsequent Report	☐ Casing Repair	☐ New	☐ New Construction ☐ Recomplete		olete	Other	
☐ Final Abandonment Notice	☐ Change Plans	Plug	and Abandon	☐ Tempor	arily Abandon	Well Spud	
	Convert to Injection	Plug	Back	☐ Water [Disposal		
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) This well was spud on 5/06/03. Drill 12 1/4" hole to 460'GL. Ran 10 joints 9-5/8" 36# csg to 447'GL.							
14. I hereby certify that the foregoing is	Electronic Submission	#21688 verified	by the BLM \	Vell Information o the Vernal	System		
Name(Printed/Typed) DAHN F.					PRESENTATIVE		

Revised

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any dellaction to lag Can South 15 the States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Date

Title

Office

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

05/12/2003

RECEIVED

MAY 2 2 2003

O 1 0 SUNDRY NOT Do not use this form for proposals to drill or to Use "APPLICAT SUBMI 1. Type of Well	U OF LAND MANAGEMENT FICES AND REPORTS ON WELLS deepen or reentry to a different reservoir ION FOR PERMIT" for such proposals TIN TRIPLICATE	Expires: March 31, 1993 5. Lease Designation and Serial No. UTU-65404 6. If Indian, Allottee or Tribe Name N/A 7. If Unit or CA, Agreement Designation GLEN BENCH				
Oil Gas X Well Well Other 2. Name of Operator SHENANDOAH ENERGY INC	CONFIDENTIAL	8. Well Name and No. OU GB 1G-19-8-22 9. API Well No.				
Address and Telephone No 11002 E. 17500 S. VERNAL, UT 84078-8526 Location of Well (Footage, Sec., T., R., M., or Survey Description)	1 Telephone No 17500 S. VERNAL, UT 84078-8526 (801) 781-4341					
	BOX(s) TO INDICATE NATURE OF NOTICE, REPO					
TYPE OF SUBMISSION Notice of Intent	TYPE OF ACTIO	Change of Plans				
Subsequent Report Final Abandonment Notice	Recompletion Plugging Back Casing Repair Altering Casing Other METER INSTALLATION	New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection Dispose Water (Note) Report results of multiple completion on Well				
give subsurface locations and measured and true vertical depths for all fi	details, and give pertinent dates, including estimated date of starting any proposed work, narkers and zones pertinent to this work) as installed a new Autograph meter to measure the lease fuel for t	Completion or Recompletion Report and Log form.) If well is directionally drilled.				

14. I hereby certify that the foregoing is true and correct. Signed Raleen Searle all w	Title	REGULATORY AFFARIS ANALYST	Date	7/7/03
(This space for Federal or State office use)			-	
Approved by:	Title		Date	
Conditions of approval, if any				
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to mal representations as to any matter within its jurisdiction.	ke to arry d	epartment or agency of the United States any false, fictitious or transdulent st	atements	RECEIVED

Form 3160-5 (August 1999)

NITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 200

5. Lease Serial No. UTU 65404

_		
A	1	1

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

6.	If Indian,	Allottee o	r Tribe Name	;

<u> 1 </u>							
SUBMIT IN TRI	7. If Unit or CA/Agreement, Name and/or No.						
Type of Well	8. Well Name and No. OUGB 1G 19 8 22						
Name of Operator SHENANDOAH ENERGY INC	9. API Well No. 43-047-34696						
3a. Address 11002 EAST 17500 SOUTH VERNAL, UT 84078	10. Field and Pool, or Exploratory GLEN BENCH						
4. Location of Well (Footage, Sec., T	11. County or Parish, and State						
Sec 19 T8S R22E NENE 806	UINTAH COUNTY, UT						
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA							
TYPE OF SUBMISSION	TYPE OF ACTION						
□ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)		□ Water Shut-Off		
☐ Notice of Intent	☐ Alter Casing	☐ Fracture Treat	ation	☐ Well Integrity			
Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomp	olete	☑ Other		
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug and Abandon	☐ Tempor	Temporarily Abandon Production Start-			
	☐ Convert to Injection	☐ Plug Back	□ Water I	Disposal			
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final At determined that the site is ready for fi	ally or recomplete horizontally, and will be performed or provide operations. If the operation respondent Notices shall be file	give subsurface locations and measure the Bond No. on file with BLM/BIA ults in a multiple completion or rec-	ured and true ve A. Required sul ompletion in a	ertical depths of all pertir bsequent reports shall be new interval, a Form 316	nent markers and zones. filed within 30 days 60-4 shall be filed once		

THIS WELL COMMENCED PRODUCTION ON 6/5/03.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #23701 verified by the BLM Well Information System For SHENANDOAH ENERGY INC., sent to the Vernal								
Name (Printed/Typed) ANN PETRIK	Title ADMINISTRATIVE CONTACT							
	Date 06/26/2003							
Name (Printed/Typed) ANN PETRIK Title ADMINISTRATIVE CONTACT Date 06/26/2003 THIS SPACE FOR FEDERAL OR STATE OFFICE USE Deproved By Title RECEDIATED								
Approved By	Title RECELVED							
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	JUL 1 0 2003							

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make the distribution of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Form 3160-4 SUBMIT IN DUPLICATE Budget Bureau No. 1004-0137 (Nove sher 1983) UNIO STATES (See other in-(formerly 9-330) Expires August 31, 1985 DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** structions on 012 LEASE DESIGNATION AND SERIAL NO. reverse side). · A De Contractor UTU-65404 IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG N/A UNIT AGREEMENT NAME OIL PERIOD ia. TYPE OF WELL GAS WELL x N/A Oth FXPIRED TYPE OF COMPLETION FARM OR LEASE NAME WORK DEEP. PLUG pirk BACK RESVR WELL X OVER EN NAME OF OPERATOR WELL NO OU GB 1G 19-8-22 OEP Uinta Basin, Inc. SHENANDOAH ENERGY FUC ADDRESS OF OPERATOR. 10. FIELD AND POOL, OR WILDCAT **NATURAL BUTTES** 11002 E. 17500 S. VERNAL, UT 84078-8526 435-781-4342 Dahn Caldwell LOCATION OF WELL (Report location clearly and in accordance with any State require 11. SEC.,T., R., M., OR BLOCK AND SURVEY At surface NENE, 806' FNL & 698' FEL OR AREA At top rod. interval reported below NENE, 806' FNL & 698' FEL Sec 19 T8S R22E Mer SLB At total depth NENE, 806' FNL & 698' FEL PERMIT NO DATE ISSUED COUNTY OR STATE 12 13 PARISH 43-049-34696 UT Uintah 19. ELEV. CASINGHEAD DATE SPUDDED 18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 16. DATE T.D. REACHED DATE COMPL. (Ready to prod.) 05/17/03 06/04/03 05/06/03 KB 20. TOTAL DEPTH, MD & TVD 21. PLUG BACK T.D., MD & TVD IF MULTIPLE COMPL. INTERVALS ROTARY TOOLS CABLE TOOLS HOW MANY DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)* WAS DIRECTIONAL SURVEY MADE 4914' - 4920' No 27. WAS WELL CORED TYPE ELECTRIC AND OTHER LOGS RUN CBL & COMP NEUTRON - L/GR -AI w/LC/GR No CASING RECORD (Report all strings set in well) AMOUNT PULLED CEMENTING RECORD DEPTH SET (MD) CASING SIZE WEIGHT, LB/FT HOLE SIZE 175 sxs 9.625 36.0 463 12-1/4 5.50 15.5 5072 7.875 455 sxs LINER RECORD TUBING RECORD PACKER SET (MD) SIZE TOP (MD) BOTTOM (MD) SACKS CEMENT* SCREEN (MD) SIZE DEPTH SET (MD) 2-7/8 4968 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. 31. PERFORATION RECORD (Interval, size and number) DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 4914' - 4920' 4914' - 4920' Shot & ran pkr in well. Perfs were broken down using rig pump. DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) WELL STATUS (Producing or 6/05/03 Flows from well Producing GAS-MCF. GAS-OIL RATIO PROD'N FOR WATER-BBL DATE OF TEST HOURS TESTED CHOKE SIZE OIL-BBL TEST PERIOD 12.7 0 70.9 6/14/03

GAS-MCF OIL GRAVITY-API (CORR.) FLOW. TUBING PRESS. CASING PRESSURE CALCULATED OIL-BRI WATER-BBI 24-HOUR RATE 140 DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY Sold LIST OF ATTACHMENTS I hereby certify that the f geing and establed information is co aplete and correct as determined from all available records SIGNED Jim Simonton (WIS is Down - manual Copy) DATE TITLE Completion Manager (See Instructions and Spaces for Additional Data on Reverse Side) Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and GEOLOGIC MARKERS 38. recoveries): TOP DESCRIPTION, CONTENTS, ETC. TOP BOTTOM FORMATION TRUE NAME MEAS, DEPTH 5075 2260 Green River VERT. DEPTH 2260 Green River 3420 Mahogony Glen Bench Sand 4911 سنافأ فالماف المعساطين أأران 5075

SEI (N4235) to QEP (N2460)

well_name	Sec	Т	R	api DOGM	Entity		type	stat		unit_name
BRENNAN BOTTOM 1HG-	18	0708	210F	4304734565		Federal	OW	APD	C	BRENNAN BOTT
BRENNAN BOTTOM TITO	10	0703	ZIOL	4304734303		reaciai		III D		DALLA I I I I I I I I I I I I I I I I I I
OU GB 1G-19-8-22	19	080S	220E	4304734696	13727	Federal	OW	DRL	C	GLEN BENCH EN
STIRRUP U 8W-34-7-21	34	070S	210E	4304734707		Federal	GW	APD	C	STIRRUP



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155

IN REPLY REFER TO UT-922

June 9, 2003

QEP Uinta Basin, Inc. 1050 17th Street, Suite 500 Denver, Colorado 80265

Re:

Glen Bench Enhanced Recovery Unit

Uintah County, Utah

Gentlemen:

On May 30, 2003, we received an indenture dated February 1, 2003, whereby Shenandoah Energy, Inc. changed it name and QEP Uinta Basin, Inc. was designated as Successor Unit Operator for the Glen Bench Enhanced Recovery Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective June 9, 2003. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under Glen Bench Enhanced Recovery Unit Agreement.

Your nationwide (Eastern States) oil and gas bond No. B000024 will be used to cover all operations within the Glen Bench Enhanced Recovery Unit.

It is requested that you notify all interested parties of the name change of unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Robert A. Henricks

Robert A. Henricks Chief, Branch of Fluid Minerals

Enclosure

bcc: Field Manager - Vernal (w/enclosure)

SITLA

Division of Oil, Gas & Mining Minerals Adjudication Group

File - Glen Bench Enhanced Recovery Unit (w/enclosure)

Agr. Sec. Chron Fluid Chron

UT922:TAThompson:tt:6/9/03

Questar

QEP Uinta Basin, Inc.

11002 East 17500 South Vernal, UT 84078

Tel 435 781 4300 • Fax 435 781 4329

CERTIFIED MAIL RETURN RECEIPT REQUESTED (Z 436 799 441)

November 21, 2003

Mr. Chuck Williams, 8P-W-GW U.S. EPA, Region VIII 999 18th Street, Suite 300 Denver, Colorado 80202-2466

RE: OUGB 1G-19-8-22 Underground Injection Control Permit Application Class II Type R

Dear Mr. Williams,

Enclosed is an Underground Injection Control (UIC) Permit Application (including all attachments) to convert the subject well to a Class II Enhanced Oil Recovery injection well.

If you have any questions or concerns regarding this application, I can be reached at 435-781-4308.

Sincerely,

Stephanie L. Tomkinson

Regulatory Affairs Technician

Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

Enclosures:

UIC Permit Application (EPA Form 7520-6)

Outlined Requirements for Form 7520-6 "Attachments"

Attachment B - Area of Review

Attachment C – Corrective Action Plan and AOR Well Data

Attachment H-2 – Unit Wide Fracture Determination

Attachment H-4 – Water Analysis

Attachment M – Wellbore Schematic, Completion Information, and Cement Bond Log

Attachment O - EPA Form 7520-14 Plugging and Abandonment Plan

Attachment R – Necessary Resources (Bond Information)

Via: CERTIFIED MAIL/RETURN RECEIPT REQUESTED (436 799 445) cc:

Mr. Brad Hill

Department of Natural Resources Division of Oil, Gas, & Mining

1594 West North Temple, Suite 1210

P.O. Box 145801

Salt Lake City, Utah 84114-5801

RECEIVED

NOV 2 4 2003

							$\overline{}$							_	/						
																		OMB No 2040-		oroval expire	s 1/31/05
					Uni	ted St	ates	Enviro	nment	tal	Protecti	on Ag	jency		XE)	Jean.	JEG.			74.00	Wall.
						UNDE	RGR	DUND	INJEC	TIC	N CONT	TROL								T/A	С
	EF	ZΑ	\				DED	MIT /	A DDI I		ATION										
		-	-			(0 . #				-					١						
						•			•		he Safe Dr	•			U						
											, 40 CFR 1										
	***					REA	D ATTA	CHED II	NSTRUC' R OFFIC	TION IAL	NS BEFORI USE ONLY	E STAR	TING								
Арр	lication Ap	proved		D	ate Re	ceived			Permit N	Numb	er			Well	ID			F	INDS N	Number	
mo	day	ye	ar	mo	de	ay	year														
rjagija iza	কলে <i>ব</i> ছুছু	gradi i	1 24 12 1	II. OWNE	D NAL	IE AND A	nnoce	 ੑ ਜ਼ੑਸ਼ਜ਼ਜ਼	er ground	170		200	5 - T. C. T. T.	A CHARLE	MADE:	MESM	DE AN	D'ADDRES		HW377	5 - 19 Let
Owner N	ame			II. OVER	IV INCM	IL AND A	WUNCO	y dand r	<u>Janobera Ba</u>	* * * *	ું કે ઉપાય મુખ્યત્વે કે માટે ક	Oneral	or Name	activitat s	e, or ca	S. A.M.	****			ka 134, 15451	u prije k
QEP Uir		n. Inc.											Jinta Basir	ı, Inc.							
Street Ad		,											Address								
11002 E	ast 1750	0 Sou	ıth									11002	East 1750	0 Sout	:h						
City							State		Zip Cod	e		City						State		Code	
Vernal							UT		84078			Verna				all frames in Market		UT	840		1
	V. Comr	nercia	i Facilit	у		V.	Owner	ship				n. Leg	a common		7.			VIESIC	Codes		
	.,				Į		vate				☑ Owner										
_	Yes				İ	= ' - '	deral				Opera	tor						13	11		
	No					∐ Otl	ner														
	***		$\mathcal{A}(\mathcal{A}_{\mathcal{I}}^{*})$		Sec. 5				yıı.	We	# Status (1	lark 'X	1	**************************************) -		ROPERTY.		111		
A,			Da	ite Starte	:d		[√ в м	odificatio	n/C	Conversion				C. Prop	osed					
	4:	m	10	day	ye T	ar			oumoud	Ji 1, C	20114-01-31-011										
Оре	rating				1																
		1095	सहस्र हर	40 J. J.	STORY THE		IX. Tv	oe of Pe	emit Kee	ues	ted (Mark	'X' an	specify if r	CONTR	1			1		TOTAL NEWS	
						Nu		f Existin			A de A Marie Sander-No.		er of Propo			1	Na	ame(s) of t	field(s)	or projec	t(s)
⊻ A. ≀	Individua	ıt	<u></u> П	B. Area					_												
								1					1					Glen	Bench	Unit	
		** N/	X 30		(14.5 PM			X.	Class ar	d I	ype of We	(800	reverse)		972 K. H	F 10		No.			
Α.	Class(es)	В	. Type(s)		C.	If class	is "other	" or	type is coo	le "x", e	explain). Numb	er of v	vells per ty	pe (if a	rea perm	it)
	er code(s			ter code(
	II			R																	
															Z w Zin () n Zin wikin i	**************************************	2112 TO THE TOTAL			10 - 1 4 7 7 7 7 7 7 7	AT 18 ASS
										ield	or Project						23437.2	lan Lands	(Mark	x ")	40
	atitude	10	├	ongitude	_		1 _	ip and R		_		11:	I = -+ 6	1 :	1	✓ Ye	s				
Deg	Min	Sec	Deg	Min	Sec	Sec 19	Twp	Range 22E	1/4 Se		Feet from 806	Line N	Feet from 698	Line E		☐ No)				
	্যুমকা শ্রে	1 30 2		Transport to the second	- F. 45	19	88	<u> </u>			Attachme					NEW PRODUCTION OF		*****************************	rong,	77 P 74 W	1,446.2
			184	* * * * * * * * * * * * * * * * * * * *	the Administration	6 Ø 15 1	* May 17 44		. The state of the	- Avior		, , , , , , , , , , , , , , , , , , ,	egging. All discharges	Controlled Section Con-	ercapto s	jeran, istrovest.	erer i e	of the room officials	(在1700年10日) 1	G8978-41, 17.000	TO SERVICE SERVICE
(C	omplete	the fo	llowing	question	s on a	a separ	ate she	et(s) and	d numbe	r ac	cordingly;	see ins	tructions)								
													chments A	U (p _l	2-6) a	s appro	priate.	Attach m	aps		
wt	nere requ	ıired. l	_ist atta	chments	by le	tter whi	ch are a	applicab	le and a	re in	cluded with	n your a	application.								
#" \$ 1572		A STA	1985,1868	rag vers	4 7 7 7 7	7 (1) (1)	or engine			ΥN	North	ien d	34 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	714	· -7/5/8	YE MIT	7790	regration and	TO VOICE	E 10 2 10 15	
		4,525	Leavin Nam 1.3	. y 24 5 54	1, 17	2 May 101 1		····· • 27 - 57	· 2006 * 2.2 . 1.25**** \$ 1	7.0	一次 电心电线 开节乳球节	erent Politic 35	acar, Associational per 产之地。	on and the Section	ion 1970 de 1880	- 10 - 1987 (1-4)	2 0.577	and the second of the second o	· SUPPRESS OF	*** * * * * * * * * * *	98
Ιc	ertify und	der the	penali	y of law	that I	have pe	ersonall	y examii	ned and	am ·	familiar wit	h the ir	nformation s	submitt	ed in th	is docui	ment a	ınd all			
													obtaining th								
inf	ormation	ı is tru	e, accu	rate, and	com	plete. I a	am awa	re that t	here are	sig	nificant pei	nalties	for submittir	ng false	e inform	nation, ir	ncludin	ig the			

B. Phone No. (Area Code and No.)

D. Date Signed /1/20/03

435-781-4308

possibility of fine and imprisonment. (Ref. 40 CFR 144.32).

Stephanie L. Tomkinson, Regulatory Affairs Technician

A. Name and Title (Type or Print)

EPA Form 7520-6 (Rev. 8-01)

C. Signature

OUGB 1G-19-8-22 NENE Section 19 T8S R22E SLBM LOT 5 806FNL 698FEL Uintah County, Utah ATTACHMENTS

to EPA Form 7520-6 (UIC Form 4)

QEP Uinta Basin, Inc. (QEP) is applying to convert the OUGB 1G-19-8-22 into an underground injection control (UIC) well. The well is within the boundaries of an existing, approved Enhanced Recovery Unit (Glen Bench Unit) and was originally drilled to produce from the Green River Formation. All information regarding the OUGB 1G-19-8-22, such as engineering report, maps, well tests, and logs have been submitted to the State of Utah Division of Oil Gas and Mining, Bureau of Land Management, Bureau of Indian Affairs and the Environmental Protection Agency.

A. Area of Review (AOR) Methods

The AOR will be a ¼ mile radius surrounding the subject well.

B. Maps of AOR (see attachment B)

Attached are topographic map (indicating cultural features), well survey plat, and AOR map indicating the proposed injection well and wells in the AOR.

C. Corrective Action Plan and AOR well Data (see attachment C)

Attached is a tabulation of all wells with-in the AOR. Completion and/or plugging data for each well in the AOR is attached. There are no wells in the AOR operating over the fracture pressure of the injection formation.

D. NA

E. Name and Depth of USDW's

Report of water encountered during the drilling of the OUGB 1G-19-8-22 indicates there was no observed fresh water zones encountered while drilling the well. The base of moderately saline water (TDS 10,000 mg/l or less) is derived from USGS Open File Report 87-394/Utah Dept. of Natural Resources Technical Pub. No. 92: <u>Base of Moderately Saline Ground Water in the Uintah Basin.</u> 1987; Howell, L., Longson, M.S., and Hunt, G.L. From this publication and corresponding plates, it appears that the base of moderately saline water is between 3,000' and 4,000' below ground level, which corresponds approximately to the top of the Green River contact in the well at 2478'.

F. NA

G. Geological Data on Injection and Confining Zones

The target injection zone is the interval between 4913' - 4926'. It consists of sandstone interbedded with shales, siltstone and tight carbonates.

The confining zone directly above the injection zone extends from 4624' to 4913'. It consists of shale with interbedded tight mudstones and carbonates. An additional 2172' of intervening strata lies between the top of the confining zone at 4624' and the top of the *Green River* formation at 2478'. The intervening strata consists of tightly interbedded shales, carbonate mudstones, siltstones and sandy limestones.

USDW's in the Uintah formation are protected by cement and confining zones above the injection zone.

H. Operating Data

1) Anticipated maximum daily injection volume.

At this time QEP is requesting to waive the maximum daily volume requirement. Existing injection permits in the area have no daily volume limit requirement in the UIC permit. Please refer to the following final permits:

Well Name	EPA UIC Permit Number
Glen Bench 6-16-8-22	UT2878-04539
Glen Bench 15-19-8-22	UT 2806-04338
Glen Bench 7-16-8-22	UT2803-04335
Glen Bench 22-20-8-22	UT2755-04235
Glen Bench 12-16-8-22	UT2765-04248

The estimated injection pressure gradient is based upon existing UIC permitted surface injection pressures within the Glen Bench Unit (0.709). Please refer to EPA document reference number 8P-W-GW Unit-Wide Fracture Determination in the Glen Bench Enhanced Recovery Unit, Uintah Basin, Utah (see attachment H-2).

Theoretical maximum allowable surface injection pressure (Pm) is 1331 psig.

Pm = maximum pressure at the wellhead

1.012 = specific gravity of the injection fluid

0.709 =face fracture gradient

4914' = depth to top of perforations

0.433 = normal pressure gradient

Pm = [0.709 - 0.433 (1.012)] 4914 = 1331 psig

- The nature of the annulus fluid is described as packer fluid: a mixture of fresh water with scale and corrosion inhibitors.
- 4) Source and Analysis of the Injection Fluid
 The injectate source is the Glen Bench Injection Station, fresh water analysis is attached (see attachment H-4).
- I. NA
- J. NA
- K. NA
- L. NA
- M. Construction Details (see attachment M for well bore diagram/completion report/CBL) = Excluded from this "file copy" but included w/ ORIGINAL copy to EPA. Set.

The well bore profile for the OUGB 1G-19-8-22 shows the current configuration of the well. The string of surface casing consists of 463' of 9 5/8", 36#, K55 pipe, set with 175 sx of class "A regular" cement in a 12 1/4" hole. Cement was circulated to the surface. The production string consists of 5072' of 5 1/2", 15.5#, J55 pipe set with 455 sx of class "A regular" (125 sx poz + 330 sx class A regular) cement in a 7 7/8" hole. The top of cement is estimated from the cement bond long (CBL) to be at 1100'. The CBL also shows the perforated interval 4914' – 4920' or injection zone appears to have an adequate bond. The 2 7/8" tubing is to be secured with a full bore *Arrow Set One* packer, set at approximately 4820' with 15,000# tension.

Procedures to convert the OUGB 1G-19-8-22 to injection would be as follows:

- 1) MIRU, unseat pump. POOH with rods and pump.
- 2) RIH with bit and scraper to PBTD.
- 3) Set retrievable packer at 4820'.
- 4) Perform mechanical integrity test (MIT); if well passes test, surface equipment will be hooked up and the well will be placed on injection status and shut-in pending the approval of the permit to inject.
- N. NA
- O. NA
- P. NA
- Q. Plugging and Abandonment Plan (see attachment Q for schematic)

QEP will notify the Director forty-five (45) days before conversion, or abandonment of the well. The Plugging and Abandonment Plan shall be as follows:

MIRU, ND WH & NU BOPE.

Pull downhole equipment PU workstring and clean out to PBTD, circulate hole clean.

Plug #1 PU 5 ½" cast iron bridge plug (CIBP), set CIBP at 4864', dump bail 35' cement plug of approximately 4 sx on top of CIBP 4829' – 4864'.

Note: Cement plugs will be separated by a 9.2 PPG plugging gel (brine water with a gelling agent).

- Plug #2 Mahogany Bench estimated at 3260° 3350° . Set balanced plug of approximately 24 sx cement inside 5 ½" casing to cover Mahogany Bench zone (3210° 3400°) as required by BLM. Pull up hole and circulate tubing to ensure tubing is clear.
- Plug #3 Top Green River/Base USDW (2478') set balanced plug of approximately 13 sx cement inside 5 ½" casing between 2428' and 2528'.

Pressure test casing to 500 psi, perform cementing as necessary to seal off any casing leaks; if no leaks are determined, proceed with the next step.

- Plug #4 Surface casing shoe at 462'. Perf and pump cement to fill surface casing annulus and inside of 5 ½" production casing. Set balanced plug of approximately 38 sx cement from 412' 512'.
- Plug #5 Cut off casing 4' below ground level, set balance plug from 0' 50', 19 sx cement.

Cap and install P&A marker with well data, remove surface equipment, and reclaim location.

R. Necessary Resources

QEP Uinta Basin, Inc., operates this well under EPA UIC Bond Number 04127292 (see attachment R).

S. Aquifer Exemptions

Through an agreement between the State and EPA, the Green River Formation has been previously exempted.

T. List of Existing EPA UIC Permits in the Glen Bench Unit:

Well Name EPA UIC Permit Number
Glen Bench 6-16-8-22 UT2878-04539

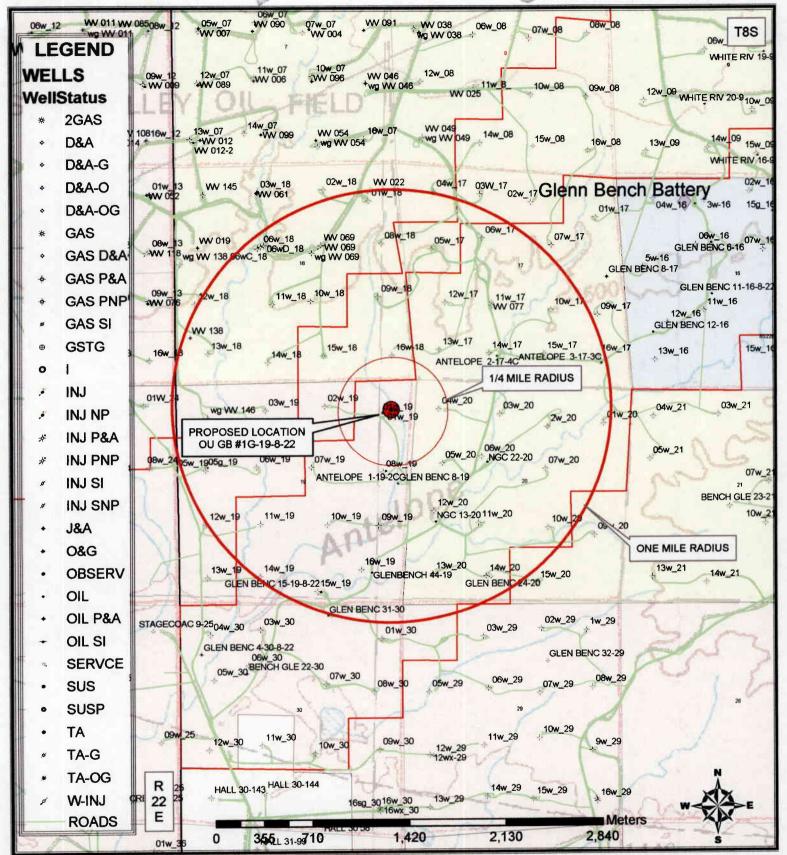
Glen Bench 15-19-8-22	UT 2806-04338
Glen Bench 7-16-8-22	UT2803-04335
Glen Bench 22-20-8-22	UT2755-04235
Glen Bench 12-16-8-22	UT2765-04248

U. Description of Business

QEP Uinta Basin, Inc., engages in the exploration, drilling, and production of crude oil and natural gas in the Rocky Mountain West Region.

AOR

ATTACHMENT B



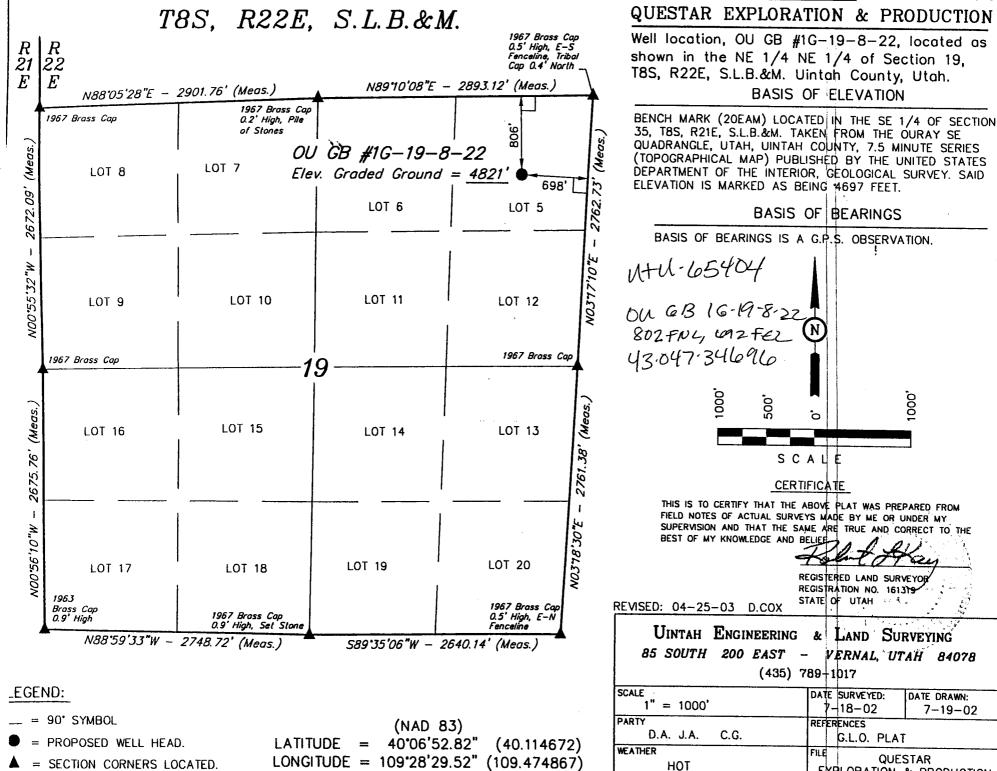
10/22/03



OU GB #1G-19-8-22 Section 19, T8s, R22E, S.L.B. & M. 802" FNL 692" FEL

7-19-02

EXPLORATION & PRODUCTION



TTACHMENT C

Attachment C

Attachment Part C: Corrective Action Plan and AOR Well Data AOR Wells Within 1/4 Mile Radius of OUGB 1G-19-8-22

Well Name & Number	Status	Location	API#	Comp Date	Top Perf	Bottom Perf	PBTD
OUGB 1W-19-8-22	Active-Gas	774' FNL, 651' FEL, NENE, SECTION 19, T8S, R22E, SLBM	43-047-34512	5/23/2002	6914'	7152'	7408'
OUGB 4W-20-8-22	Active-Gas	691' FNL, 653' FWL, NWNW, SECTION 20, T8S, R22E, SLBM	43-047-34043	7/29/2002	6496'	6910'	7562'

OUGB # 1W-19-8-22 **Natural Buttes** 774' FNL, 651' FEL NE1/4NE1/4 S19-T8S-R22E **Uintah County, Utah**

API#:

43-047-34512

LEASE NUMBER:

U-65404

GL ELEVATION:

4819'

KB ELEVATION:

TD:

4833' 7500'

Original PBTD:

7408'

Current PBTD:

7408'

Spud Date:

04/23/2002

Drill Rig Spud:

04/29/2002

TD Reached:

05/05/2002

First Production:

05/24/2002

CASING DETAIL

Surface Casing

121/4" Borehole

11 jts - 9 ^{5/8}", 36#, K-55, LT&C @ 466' Cmtd w/ 175 sxs Prem Plus

Production Casing

7 7/8" Borehole

11 jts - 41/2" 11.6# M-80 LT&C

162 jts - 41/2" 11.6# J-55 LT&C

Float Collar @ 7456' Shoe Set @ 7500'

Cmtd w/ 740 sxs HiFill Mod lead and 310 sxs 50/50 Pozmix tail

TOC Lead @ ~ 900' by CBL

TUBING DETAIL:

See wellbore schematic

PERFORATION DETAIL:

			·	,	ļauraumaumaumauma	
Open Perfs	<u>Stimulation</u>	-				Perf Status
	1					
6914'-6932'	Frac w/	94,000	Lbs in	36,100	Gals	open
41.80 (41.1140) (11.1141) (11.1141) (11.1141) (11.1141) (11.1141) (11.1141)		\$ (Jac. 19)				
7106′-7112′						open
7130′-7140′	Frac w/	106,000	Lbs in	42,400	Gals	open •
7148′-7152′						open
Total SLF		200,000	Lbs in	78,500	Gals	

WELL HISTORY:

Initial Completion: 05/17/2002 - 05/23/2002

Ran CBL/VDL/GR logs. Perf 7152' to 7106' gross interval. Frac w/ Delta Frac 200 containing 106,000# 20 /₄₀ sand in 42,400 gals at ATR = 33 BPM, ATP = 1880 psig, ISIP= 1122 psig. Perf 6914'-6932' interval. Frac w/ Delta Frac 200 containing 94,000# 20 /₄₀ sand in 36,100 gals at ATR = 25 BPM, ATP = 1645 psig, ISIP= 1750 psig. ONSICP = 400 psig. C/O to PBTD @ 7408'. Land prod tubing w/ EOT @ 7090'. Kickoff well and test on 24 /₆₄" choke w/ FTP= 825 psig, SICP= 1175 psig. TWOTP. IPF (05/25/02) 2,023 Mcfpd, 4 BCPD, 3 BWPD on 27 /₆₄" choke w/ FTP= 638 psig, SICP= 958 psig. First production on 05/24/2002.

FIELD: Natural Buttes	G 4,819 ' KBE: 4,833 '	Start Date: 05/17/02 Finish Date: 05/23/02
Well: OUGB # 1W-19-8-22	TD: 7,500 ' PBTD: 7,408 '	Current Well Status: Producing Gas Well
Location: NE¼-NE¼-S19-T8S-R22E	API#: 43-047-34512	Reason for Pull/Workover: NEW WASATCH COMPLETION
Uintah County, Utah	Lease #: U-65404	NEW WASATCH COMPLETION
Weill	bore	
Schen	natic	Tubing Landing Detail: Description Size Footage Depth
Surface casing		KB to Tbg Head 14.00 14.00 Hanger
Size: 9 5/8"		219 jts - 2 3/8" J-55 tubing 2 3/8"
Weight 36# Grade: K-55		F Nipple (1.81" ID) 2 3/8" 7,060.00 1 jts - 2 3/8" 3-55 tubing 2 3/8"
Cmtd w/ 175 sxs		Pumpoff bitsub 7,090.00
Hole size: 12¼"		EOT @ 7,090.00
Set @ 466' <u>{</u>		TUBING INFORMATION
]		Condition: New: X Used: Rerun:
	TOC @ 900 '	Grade: J-55
EXCLUDED PERFS	OPEN PERFS	• • • • •
		Wellhead Detail: 7 1/16" 2000#
		7 1/16* 3000# X 7 1/16* 5000#
		Other:
		Hanger: Yes <u>X</u> No
).	SUMMARY Initial Completion: 05/17/2002 - 05/23/2002
		Ran CBL/VDL/GR logs. Perf 7152' to 7106' gross interval. Frac w/ Delta Frac 200 containing
		$106,000\#^{20}/_{40}$ sand in 42,400 gals at ATR = 33 BPM, ATP = 1880 psig, ISIP= 1122 psig. Perf 6914'-6932' interval. Frac w/ Delta Frac 200 containing 94,000# $^{20}/_{40}$ sand in 36,100 gals at
	N:	ATR = 25 BPM, ATP = 1645 psig, ISIP= 1750 psig. ONSICP = 400 psig. C/O to PBTD @ 7408'. Land prod tubing w/ EOT @ 7090'. Kickoff well and test on 24 64" choke w/ FTP= 825 psig, SICP=
		1175 psig. TWOTP.
		IPF (05/25/02) 2,023 Mcfpd, 4 BCPD, 3 BWPD on ²⁷ / ₆₄ " choke w/ FTP= 638 psig, SICP= 958 psig.
		First production on 05/24/2002.
	6914'-6932' Wasatch	
	8	
	Y Y	
	,	
	F Nipple @ 7060 '	
	EOT @ 7090 ' 7106'-7112' Wasatch	
	7130'-7140' Wasatch 7148'-7152' Wasatch	
	y 15	
Production Casing		
Size: 4½" Weight 11.6#, M-80 & J-55		
Cmtd w/ 1050 sxs	PBTD @ 7408 '	
Set @ 7500' /	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
er er * illitari teritori.		
Prepared By: J.T. Conley	Date: 07/25/02	

OU GB 4W 20-8-22 **Natural Buttes** 691' FNL, 653' FWL NW1/4NW1/4 S20-T8S-R22E **Uintah County, Utah**

API#:

43-047-34043

LEASE NUMBER: GL ELEVATION:

U-69001

KB ELEVATION:

4817'

TD:

4831' 7675'

Original PBTD:

Current PBTD:

7630' FC 7562'

Spud Date:

06/16/2002

Drill Rig Spud:

06/24/2002

TD Reached:

06/29/2002

First Production:

07/30/2002

CASING DETAIL

Surface Casing

121/4" Borehole

10 jts - 9 ^{5/8}", 36#, K-55, LT&C @ 459' KB Cmtd w/ 175 sxs Prem Plus

Production Casing

7 7/8" Borehole

18 jts - 41/2" 11.6# M-80 LT&C

157 jts - 41/2" 11.6# J-55 LT&C

Float Collar @ 7630' Shoe Set @ 7675'

Cmtd w/ 639 sxs HiFill Lite lead and 790 sxs 50/50 Pozmix tail

TOC Lead @ ~ Not Obvious

TUBING DETAIL:

See wellbore schematic

PERFORATION DETAIL:

Open Perfs	Stimulation				
				-	

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
6496′ = 6506′	Frac w/	80,000	Lbs in	29,694	Gals
6898' - 6910'	Frac w/	70,000	Lbs in	35,868	Gals
Total SLF	-	150,000	Lbs in	65,562	Gals

OU GB 4W 20-8-22 **WELL HISTORY:**

Initial Completion: 7/22/2002 – 7/29/2002

Ran CBL/VDL/GR log. Perf 7298' - 7308'. Frac w/ Delta Frac 200 containing estimated 14,500# of $^{20}/_{40}$ sand in formation & 15,400# of sand in casing. The well screened out @ a maximum psi of 3500#. Recovered frac fluid & a considerable amt of sand. Perf 6898' - 6910'. Frac w/ Delta Frac 200 containing $70,000 \# ^{20}/_{40}$ sand in 35,868 gals at ATR = 32 BPM, ATP = 2600 psig, ISIP = 1560 psi. Perf 6496' - 6506'. Frac w/ Delta Frac 200 containing $80,000 \# ^{20}/_{40}$ sand in 29,694 gals at ATR = 25 BPM, ATP = 1800 psig, ISIP = 1915 psi.

ONSICP = 1475 psig. C/O to PBTD @ 7562'. Land prod tubing w/ EOT @ 6876'. Swab & Kickoff flowing. Test on $^{24/}_{64}$ " choke w/ FTP = 850 psig & SICP= 1100 psig. TWOTP. IPF (8/03/02) 1,181 MCFPD, 1.5 BOPD, 4 BWPD on $^{12}/_{64}$ " choke w/ FTP = 1251 psig, SICP = 1334 psig.

First production on 7/30/2002.

FIELD: Natural Buttes	GL: 4817' KBE: 4831'	Spud Date: 6/16/02 Complet	tion Date: 7/2	29/02	
Well: OU GB 4W 20-8-22	TD: 7675' PBTD: 7562'	Current Well Status: Producing G	35		
Location: NWNW 691' FNL, 653' FWL		Reason for Pull/Workover:			
·	: 43-047-34043	Initial Completion Gas Well			
Uintah County, Utah					
Wellbore					
Schematic		Tubing Landing Detail:			
		Description	Size	Footage	Depth
		KB		14.00	14.00
Surface casing		2 3/8" Bowl Hanger	2 3/8"	0.75	14.75
Size: 9 5/8"		212 - Jts J-55 Tbg	2 3/8"	6,827.88	6,842.63
Weight: 36#		1.81 "F" Nipple	2 3/8"	0.91	6,843.54
Grade: K-55		1 Jt J-55 Tbg	2 3/8"	32.20	6,875.74
Cmtd w/ 175 sxs		P.O. Sub		0.92	6,876.66
Hala sina. 13.1/4"		FOT @			6,876.66
Hole size: 12 1/4"		EOT @			0,0/0.00
Set @ 459' KB	-	TUBING INFORMATION		Joint Control	
		Condition:		_	
		New: X Used:	Remo		
	TOC @ Not Obvious	Grade: J-55 EUE 8r			
	LOC ON HOL ODVIOUS	Weight (#/ft): 4.7#			
EXCLUDED PERFS	OPEN PERFS				
		Sucker Rod Detail:			:
		Size #Rods	Ro	od Type	
1 1 1]
1 1 1					j
		Rod Information			
		Condition:			
		New: Used:	Rerun:	-	
		Grade:			
		Manufacture:			
					
		Pump Information:			
	Wasatch	API Designation	O V BHAC V T	20 Y 6 Y 2	
	Manatak	Example: 25 x 15	0 x RHAC X 2	20 1 0 1 2	
	Wasatch	Pump SN#:Original	Run Date:		
		RERUN NEW RU			
		NEISON INLAND			
		ESP Well	Flowi	ing Well	
		Cable Size:	SN @	-	6843 '
		Pump Intake @	PKR @		
		End of Pump @	FOT @		6877 '

.•



UNITED TATES ENVIRONMENTAL PROJECTION AGENCY

REGION 8 999 18TH STREET - SUITE 300 DENVER, CO 80202-2466 http://www.epa.gov/region08

APR 23 2002

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Scott M. Webb Regulatory Coordinator Shenandoah Energy Inc. 475 Seventeenth Street Denver, CO 80202

RE: UNDERGROUND INJECTION CONTROL (UIC)
Shenandoah Energy Inc. Request for
Unit-Wide Fracture Determination in
the Glen Bench Enhanced Recovery
Unit, Uinta Basin, Utah

Dear Mr. Webb:

Thank you for providing additional information that supports your request of March 14, 2002, that the Environmental Protection Agency (EPA) consider using a standard Unit-wide fracture gradient (FG) for determining the maximum allowable surface injection pressure (MAIP) for EPA regulated injection wells in the Glen Bench Enhanced Recovery Unit, Uinta Basin, Utah.

Shenandoah Energy Inc. (Shenandoah) originally made this request in a letter dated August 19, 2001. The EPA denied that request stating that Step-Rate Test (SRT) data supplied at that time, from all five existing injection wells in the Glen Bench Unit, demonstrated too wide of a spread in values to consider standardizing the fracture gradient across the Unit. Shenandoah noted that several of the SRT data sets were several years old; had been acquired soon after injection commenced into a depleted zone; and probably were not representative of the actual present reservoir conditions. Subsequently, Shenandoah ran new SRTs on two (2) wells to provide updated injection zone data to determine current reservoir conditions after several years of injection.

EPA has reviewed the new data, and based upon that review the EPA has determined that a Unit-wide fracture gradient could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Enhanced Recovery Unit. According to EPA analysis, a fracture gradient of 0.709 psi/ft may be considered a reasonable average Unit-wide fracture gradient that could be used by the Director to determine a MAIP that will assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the

confining zone adjacent to underground sources of drinking water, pursuant to 40 CFR § 146.23(a)(1).

Accordingly, a new MAIP has been determined for the five (5) regulated injection wells in the Glen Bench Enhanced Recovery Unit. Each new MAIP has been calculated using a fracture gradient of 0.709 psi/ft, a Specific gravity of 1.012, and the depth to the top perforation for each individual injection well. A Minor Permit Modification has been made to each injection well Permit in order to incorporate the changes discussed herein, and a copy of each Minor Permit Modification is enclosed with this letter.

If you have any questions regarding this decision, you may contact Dan Jackson, of my staff, at 800.227.8917, Ext. 6155.

Sincerely,

Kerrigan G. Clough

Assistant Regional Administrator Office of Partnerships and

Regulatory Assistance

encl: Minor Permit Modifications:

Glen Bench Fed. No. 22-20 Permit No. UT20755-04235

Glen Bench State No. 12-16 Permit No. UT20765-04248

Glen Bench State No. 7-16 Permit No. UT20803-04335

Glen Bench Unit No. 15-19-8-22 Permit No. 20806-04338

Glen Bench State No. 6-16 Permit No. UT20878-04539

Addendum to a Statement of Basis

cc w/encl: Mr. D. Floyd Wopsock, Chairman Uintah & Ouray Business Council Ute Indian Tribe

Ms. Elaine Willie, Environmental Director Ute Indian Tribe

Superintendent
BIA - Uinta & Ouray Indian Agency

Mr. Gil Hunt Utah Division of Oil, Gas, and Mining

Mr. Jerry Kenczka BLM - Vernal, Utah

Mr. Nathan Wiser 8ENF-T



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18TH STREET - SUITE 300 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

MINOR PERMIT MODIFICATION NO. 1 to the

EPA PERMIT NO. UT20755-04235
(A CLASS II ENHANCED RECOVERY INJECTION WELL)

for

SHENANDOAH ENERGY, INC. GLEN BENCH FEDERAL NO. 22-20 SE NW SECTION 20 - T8S - R22E UINTAH COUNTY, UTAH

Pursuant to Part III., Section B. 1., of the above-referenced underground injection control (UIC) Permit, a Minor Modification No. 1 to said Permit is to be made. Changes to the original version of the Final Permit Part II, Section 4. (b) (Injection Pressure Limitation) is as follows:

ORIGINAL VERSION.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. In order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 914 psig.

IS MODIFIED TO READ.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. <u>Injection Pressure Limitation</u>.
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 1315 psig.

All other provisions and conditions of the Final Permit UT20755-04235 remain as originally issued.

APR 23 2002

Date

Kerrigan G. Clough

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

Adendum to Statement of Basis

Determination of Standard Fracture Gradient in the Glen Bench Enhanced Recovery Unit

The Glen Bench Enhanced Recovery Unit trends SW-NE and is approximately 5 miles long by 1.5 miles wide. The Unit is operated by Shenandoah Resources, Inc., and has been undergoing enhanced recovery water flood production since at least 1994. At present there are five enhanced recovery injection wells, 16 production wells, and three abandoned wells in the unit. Injection wells inject approximately 10,000 to 12,000 bbl of fluid each month each. The injection fluid is made up of produced recycled water from Glen Bench Unit production wells, at an average specific gravity of 1.012 g/cc and an approximate average total dissolved solids content of between 5000 to 6000 mg/l.

The enhanced recovery injection zone, a relatively thin sand unit of the Green River Formation approximately 10' to 15' thick with porosity between 8 and 13 percent, occurs at depths between approximately 4750' to 5100' as measured from surface. The lowermost potential USDW's occur approximately 2700' to 2800' below surface in this area in discontinuous sand stringers of the Uinta Formation. A 200' to 300' thick confining interval composed of interbedded shales and siltstones overlies the injection zone, which in turn is overlain by approximately 1000' of upper Green River Formation shales, siltstones and sands.

Over the past seven years, at least five step rate tests have been performed to determine the formation parting pressure in the injection zone and the fracture gradient (Fg) for each injection well. Review of these test results indicate formation fracture parting pressure gradients range from between 0.623 to 0.837 psi/ft.

Based on these SRT data, the EPA has determined that an average fracture gradient of 0.709 psi/ft could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Unit at this time. This determination is based on an acceptable limited variance of formation fracture parting pressure gradients from these SRT results, the thickness and geologic character of the confining zone in this area, and the interpretation that injection under injection pressure conditions derived from this fracture gradient would not initiate new or propagate existing fractures in the confining zone so that it will continue to provide an effective barrier to prevent fluid flow out of the injection zone into USDW's. Results are tabulated below.

Well	Test Date	interval:	ISIP / Chart (in psi)	Calculated : Fg'(in psi/ft)	New MAIP at Fg = 0.709	Previous 1
#6-16	Dec 23, 1999	5106' - 5111'	1230 / 940	0.623	1385 .	945
#15-19	Feb 7, 2002	4759' - 4765'	1900 / 2050	0.837	1290	985
#7-16	Jul 10, 2001	5070' - 5074'	1610 / 1540	0.741	·~ 1375	684
#22-20	Jul 10, 2001	4850' - 4856'	1297 / 1395	0.705	1315	914
#12-16	Dec 23, 1995	4960' - 4965'	550 / 770	0.637	1345	984



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18TH STREET - SUITE 300 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

MINOR PERMIT MODIFICATION NO. 1

to the

EPA PERMIT NO. UT20765-04248
(A CLASS II ENHANCED RECOVERY INJECTION WELL)

SHENANDOAH ENERGY, INC. GLEN BENCH STATE NO. 12-16 NW SW SECTION 16 - T8S - R22E UINTAH COUNTY, UTAH

for

Pursuant to Part III., Section B. 1., of the above-referenced underground injection control (UIC) Permit, a Minor Modification No. 1 to said Permit is to be made. Changes to the original version of the Final Permit Part II, Section 4. (b) (Injection Pressure Limitation) is as follows:

ORIGINAL VERSION.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. In order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 984 psig.

IS MODIFIED TO READ.

PART II. SPECIFIC PERMIT CONDITIONS

C. WELL OPERATION

- 4. <u>Injection Pressure Limitation</u>.
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the The Director will specify in Director. writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 1345 psig.

All other provisions and conditions of the Final Permit UT20765-04248 remain as originally issued.

APR 23 2002

Date

Kerrigan G. Clough

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

ddendum to Statement of Basis

Determination of Standard Fracture Gradient in the Glen Bench Enhanced Recovery Unit

The Glen Bench Enhanced Recovery Unit trends SW-NE and is approximately 5 miles long by 1.5 miles wide. The Unit is operated by Shenandoah Resources, Inc., and has been undergoing enhanced recovery water flood production since at least 1994. At present there are five enhanced recovery injection wells, 16 production wells, and three abandoned wells in the unit. Injection wells inject approximately 10,000 to 12,000 bbl of fluid each month each. The injection fluid is made up of produced recycled water from Glen Bench Unit production wells, at an average specific gravity of 1.012 g/cc and an approximate average total dissolved solids content of between 5000 to 6000 mg/l.

The enhanced recovery injection zone, a relatively thin sand unit of the Green River Formation approximately 10' to 15' thick with porosity between 8 and 13 percent, occurs at depths between approximately 4750' to 5100' as measured from surface. The lowermost potential USDW's occur approximately 2700' to 2800' below surface in this area in discontinuous sand stringers of the Uinta Formation. A 200' to 300' thick confining interval composed of interbedded shales and siltstones overlies the injection zone, which in turn is overlain by approximately 1000' of upper Green River Formation shales, siltstones and sands.

Over the past seven years, at least five step rate tests have been performed to determine the formation parting pressure in the injection zone and the fracture gradient (Fg) for each injection well. Review of these test results indicate formation fracture parting pressure gradients range from between 0.623 to 0.837 psi/ft.

Based on these SRT data, the EPA has determined that an average fracture gradient of 0.709 psi/ft could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Unit at this time. This determination is based on an acceptable limited variance of formation fracture parting pressure gradients from these SRT results, the thickness and geologic character of the confining zone in this area, and the interpretation that injection under injection pressure conditions derived from this fracture gradient would not initiate new or propagate existing fractures in the confining zone so that it will continue to provide an effective barrier to prevent fluid flow out of the injection zone into USDW's. Results are tabulated below.

Well:	Test Date	Interval		Calculated Fg (in psi/ft)	New MAIP:at: Fg = 0.709	Previous : MAIP
#6-16	Dec 23, 1999	5106' - 5111'	1230 / 940	0.623	1385	945
#15-19	Feb 7, 2002	4759' - 4765'	1900 / 2050	0.837	1290	985
#7-16	Jul 10, 2001	5070' - 5074'	1610 / 1540	0.741	1375	684
#22-20	Jul 10, 2001	4850' - 4856'	1297 / 1395	0.705	1315	914
#12-16	Dec 23, 1995	4960' - 4965'	550 / 770	0.637 ·	1345	984



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18TH STREET - SUITE 300 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

MINOR PERMIT MODIFICATION NO. 1 to the

EPA PERMIT NO. UT20803-04335
(A CLASS II ENHANCED RECOVERY INJECTION WELL)
for

SHENANDOAH ENERGY, INC. GLEN BENCH STATE NO. 7-16 SW NE SECTION 16 - T8S - R22E UINTAH COUNTY, UTAH

Pursuant to Part III., Section B. 1., of the above-referenced underground injection control (UIC) Permit, a Minor Modification No. 1 to said Permit is to be made. Changes to the original version of the Final Permit Part II, Section 4. (b) (Injection Pressure Limitation) is as follows:

ORIGINAL VERSION.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters -reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 684 psiq.

IS MODIFIED TO READ.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation.
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 1375 psig.

All other provisions and conditions of the Final Permit UT20803-04335 remain as originally issued.

APR 23 2002

Date

Kerrigan G. Clough

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

<u>_ddendum to Statement of Basis</u> _

<u>Determination of Standard Fracture Gradient in the</u> <u>Glen Bench Enhanced Recovery Unit</u>

The Glen Bench Enhanced Recovery Unit trends SW-NE and is approximately 5 miles long by 1.5 miles wide. The Unit is operated by Shenandoah Resources, Inc., and has been undergoing enhanced recovery water flood production since at least 1994. At present there are five enhanced recovery injection wells, 16 production wells, and three abandoned wells in the unit. Injection wells inject approximately 10,000 to 12,000 bbl of fluid each month each. The injection fluid is made up of produced recycled water from Glen Bench Unit production wells, at an average specific gravity of 1.012 g/cc and an approximate average total dissolved solids content of between 5000 to 6000 mg/l.

The enhanced recovery injection zone, a relatively thin sand unit of the Green River Formation approximately 10' to 15' thick with porosity between 8 and 13 percent, occurs at depths between approximately 4750' to 5100' as measured from surface. The lowermost potential USDW's occur approximately 2700' to 2800' below surface in this area in discontinuous sand stringers of the Uinta Formation. A 200' to 300' thick confining interval composed of interbedded shales and siltstones overlies the injection zone, which in turn is overlain by approximately 1000' of upper Green River Formation shales, siltstones and sands.

Over the past seven years, at least five step rate tests have been performed to determine the formation parting pressure in the injection zone and the fracture gradient (Fg) for each injection well. Review of these test results indicate formation fracture parting pressure gradients range from between 0.623 to 0.837 psi/ft.

Based on these SRT data, the EPA has determined that an average fracture gradient of 0.709 psi/ft could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Unit at this time. This determination is based on an acceptable limited variance of formation fracture parting pressure gradients from these SRT results, the thickness and geologic character of the confining zone in this area, and the interpretation that injection under injection pressure conditions derived from this fracture gradient would not initiate new or propagate existing fractures in the confining zone so that it will continue to provide an effective barrier to prevent fluid flow out of the injection zone into USDW's. Results are tabulated below.

	Well	Test Date	Interval+	ISIP:// Chart (in psi)	Calculated Fg (in psi/ft)	New MAIP:at Fg=0.709	
Γ	#6-16	Dec 23, 1999	5106' - 5111'	1230 / 940	0.623 。	1385	945
	#15-19	Feb.7, 2002	4759' - 4765'	1900 / 2050	0.837	1290	985
Γ	#7-16	Jul 10, 2001	5070' - 5074'	1610 / 1540	- 0.741	1375	684
丨	#22-20	Jul 10, 2001	4850' - 4856'	1297 / 1395	0.705	1315	914
T	#12-16	Dec 23, 1995	4960' - 4965'	550 / 770	0.637	1345	984



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

MINOR PERMIT MODIFICATION NO. 1

to the

EPA PERMIT NO. UT20806-04338

(A CLASS II ENHANCED RECOVERY INJECTION WELL)

for

SHENANDOAH ENERGY, INC.
GLEN BENCH UNIT NO. 15-19-8-22
SW SE SECTION 19 - T8S - R22E
UINTAH COUNTY, UTAH

Pursuant to Part III., Section B. 1., of the above-referenced underground injection control (UIC) Permit, a Minor Modification No. 1 to said Permit is to be made. Changes to the original version of the Final Permit Part II, Section 4. (b) (Injection Pressure Limitation) is as follows:

ORIGINAL VERSION.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 985 psig.

IS MODIFIED TO READ.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - Injection Pressure Limitation.
 - The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 1290 psig.

All other provisions and conditions of the Final Permit UT20806-04338 remain as originally issued.

APR 23 2002

Date

Kerrigan G. Clough

Assistant Regional Administrator

Office of Partnerships and

Regulatory Assistance

ddendum to Statement of Basis

Determination of Standard Fracture Gradient in the Glen Bench Enhanced Recovery Unit

The Glen Bench Enhanced Recovery Unit trends SW-NE and is approximately 5 miles long by 1.5 miles wide. The Unit is operated by Shenandoah Resources, Inc., and has been undergoing enhanced recovery water flood production since at least 1994. At present there are five enhanced recovery injection wells, 16 production wells, and three abandoned wells in the unit. Injection wells inject approximately 10,000 to 12,000 bbl of fluid each month each. The injection fluid is made up of produced recycled water from Glen Bench Unit production wells, at an average specific gravity of 1.012 g/cc and an approximate average total dissolved solids content of between 5000 to 6000 mg/l.

The enhanced recovery injection zone, a relatively thin sand unit of the Green River Formation approximately 10' to 15' thick with porosity between 8 and 13 percent, occurs at depths between approximately 4750' to 5100' as measured from surface. The lowermost potential USDW's occur approximately 2700' to 2800' below surface in this area in discontinuous sand stringers of the Uinta Formation. A 200' to 300' thick confining interval composed of interbedded shales and siltstones overlies the injection zone, which in turn is overlain by approximately 1000' of upper Green River Formation shales, siltstones and sands.

Over the past seven years, at least five step rate tests have been performed to determine the formation parting pressure in the injection zone and the fracture gradient (Fg) for each injection well. Review of these test results indicate formation fracture parting pressure gradients range from between 0.623 to 0.837 psi/ft.

Based on these SRT data, the EPA has determined that an average fracture gradient of 0.709 psi/ft could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Unit at this time. This determination is based on an acceptable limited variance of formation fracture parting pressure gradients from these SRT results, the thickness and geologic character of the confining zone in this area, and the interpretation that injection under injection pressure conditions derived from this fracture gradient would not initiate new or propagate existing fractures in the confining zone so that it will continue to provide an effective barrier to prevent fluid flow out of the injection zone into USDW's. Results are tabulated below.

Well	Test Date	a Interval	ISIP://Chart (in psi)	Calculated Fg (in psi/ft)	New MAIR at 7 Pg = 0.709 F	Previous MAIP
<i>#</i> 6-16	Dec 23, 1999	5106' - 5111'	1230 / 940	0.623	1385	945
#15-19	Feb 7, 2002	4759' - 4765'	1900 / 2050	0.837	1290	985
#7-16	Jul 10, 2001	5070' - 5074'	1610 / 1540	0.741	1375	684
#22-20	Jul 10, 2001	4850' - 4856'	1297 / 1395	0.705	1315	914
#12-16	Dec 23, 1995	4960' - 4965'	550 / 770	0.637	1345	984



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

MINOR PERMIT MODIFICATION NO. 1

to the

EPA PERMIT NO. UT20878-04539

(A CLASS II ENHANCED RECOVERY INJECTION WELL)

for

SHENANDOAH ENERGY, INC. GLEN BENCH STATE NO. 6-16 SE NW SECTION 16 - T8S - R22E UINTAH COUNTY, UTAH

Pursuant to Part III., Section B. 1., of the above-referenced underground injection control (UIC) Permit, a Minor Modification No. 1 to said Permit is to be made. Changes to the original version of the Final Permit Part II, Section 4. (b) (Injection Pressure Limitation) is as follows:

ORIGINAL VERSION.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 945 psig.

IS MODIFIED TO READ.

PART II. SPECIFIC PERMIT CONDITIONS

- C. WELL OPERATION
 - 4. Injection Pressure Limitation.
 - (b) The exact pressure limit may be increased or decreased by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. In order to determine an exact pressure limit, the permittee shall conduct a step rate injection test or other authorized well test(s) that will serve to determine the fracture pressures of the injection zone. Test procedures shall be pre-approved in writing by the Director. The Director will specify in writing, to the permittee, any increase or decrease to the injection pressure based upon the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration and approval is made, the initial injection pressure, measured at the surface, shall not exceed 1385 psig.

All other provisions and conditions of the Final Permit UT20878-04539 remain as originally issued.

APR 23 2002

Date

Kerrigan G. Clough

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

Addendum to Statement of Basis

Determination of Standard Fracture Gradient in the Glen Bench Enhanced Recovery Unit

The Glen Bench Enhanced Recovery Unit trends SW-NE and is approximately 5 miles long by 1.5 miles wide. The Unit is operated by Shenandoah Resources, Inc., and has been undergoing enhanced recovery water flood production since at least 1994. At present there are five enhanced recovery injection wells, 16 production wells, and three abandoned wells in the unit. Injection wells inject approximately 10,000 to 12,000 bbl of fluid each month each. The injection fluid is made up of produced recycled water from Glen Bench Unit production wells, at an average specific gravity of 1.012 g/cc and an approximate average total dissolved solids content of between 5000 to 6000 mg/l.

The enhanced recovery injection zone, a relatively thin sand unit of the Green River Formation approximately 10' to 15' thick with porosity between 8 and 13 percent, occurs at depths between approximately 4750' to 5100' as measured from surface. The lowermost potential USDW's occur approximately 2700' to 2800' below surface in this area in discontinuous sand stringers of the Uinta Formation. A 200' to 300' thick confining interval composed of interbedded shales and siltstones overlies the injection zone, which in turn is overlain by approximately 1000' of upper Green River Formation shales, siltstones and sands.

Over the past seven years, at least five step rate tests have been performed to determine the formation parting pressure in the injection zone and the fracture gradient (Fg) for each injection well. Review of these test results indicate formation fracture parting pressure gradients range from between 0.623 to 0.837 psi/ft.

Based on these SRT data, the EPA has determined that an average fracture gradient of 0.709 psi/ft could reasonably be used by the Director to determine the MAIP for EPA regulated injection wells in the Glen Bench Unit at this time. This determination is based on an acceptable limited variance of formation fracture parting pressure gradients from these SRT results, the thickness and geologic character of the confining zone in this area, and the interpretation that injection under injection pressure conditions derived from this fracture gradient would not initiate new or propagate existing fractures in the confining zone so that it will continue to provide an effective barrier to prevent fluid flow out of the injection zone into USDW's. Results are tabulated below.

Well	Test Date	Interval	ISIP / Chart (in psi)	Calculated Fg (in psi/ft)	New MAIP at Fg = 0.709	Previous MAIP
#6-16	Dec 23, 1999	5106' - 5111'	1230 / 940	0.623	1385	945
#15-19	Feb.7, 2002	4759' - 4765'	1900 / 2050	0.837	1290	985
#7-16	Jul 10, 2001	5070' - 5074'	1610 / 1540	0.741	1375	684
#22-20	Jul 10, 2001	4850' - 4856'	1297 / 1395	0.705	1315	914
#12-16	Dec 23, 1995	4960' - 4965'	550 / 770	0.637	1345	984

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

Holding Time Summary

Client: Project:

Project ID:

Questar

ucsiai

Red Wash

Report Number:

0310124-1

Date Reported:

10/30/03

Work Order:

0310124

Sample ID	Client Sample ID						Date Collec	ted
pН							10/20/03	1 .
Solids, Total Dis	solved (TDS)						10/20/03 15:30	7
Specific Conduct	ance						10/20/03 14:15	28
Specific Gravity							10/27/03 10:30	999
0310124-06A	QEP #6 (Glen Bench I		chate				10/16/03 14:	20
Parameter		Start Date	End Date	нт	Prep Date	нт	Analysis Date	нт
pН							10/20/03	1 '
Solids, Total Dis	solved (TDS)						10/20/03 15:30	7
Specific Conduct	ance						10/20/03 14:15	28
Specific Gravity							10/27/03 10:30	999
0310124-07A	QEP #7 (West End Dis		chate				10/16/03 14	30
Parameter		Start Date	End Date	нт	Prep Date	нт	Analysis Date	нт
pН							10/20/03	1 '
Solids, Total Dis	solved (TDS)						10/20/03 15:30	7
Specific Conduct	ance						10/20/03 14:15	28
Specific Gravity							10/27/03 10:30	999
0310124-08A	QEP #8 (21A Injection		chate		<u> </u>		10/16/03 14:40	
Parameter		Start Date	End Date	HT	Prep Date	HT	Analysis Date	HT
pН							10/20/03	1 '
Solids, Total Dis	solved (TDS)						10/20/03 15:30	7
Specific Conduct	ance						10/20/03 14:15	28
Specific Gravity							10/27/03 10:30	999
0310124-09A	QEP #9 (Central Batter	P #9 (Central Battery) Leachate		10/16/03 15	10			
Parameter	THE STATE OF STATE	Start Date	End Date	нт	Prep Date	нт	Analysis Date	нт
pН					•		10/20/03	1 '
Solids, Total Dis	solved (TDS)			~			10/20/03 15:30	7

^{* -} The recommended holding time was exceeded

Mountain States Analytical, LLC

1645 West 2200 South · Salt Lake City, Utah 84119 · 800-973-6724

Client:

Ms. Stephanie Tomkinson

Questar

11002 E. 17500 So. Vernal, UT 84078

(435) 781-4308 Fax: (435) 781-4329

Red Wash

Project:
Project ID:

Purchase Order: 2FW033

Report Number:

0310124-1

Date Reported:

10/30/03

Work Order:

0310124

Lab Sample ID:

0310124-06A

Client Sample ID:

QEP #6 (Glen Bench Injection)

Date Collected:

10/16/03

Date Received:

10/20/03 09:55

Matrix:

Water

COC ID:

Parameter	Result	MDL	PQL	Units	DF	Date Analyzed	Analyst
SW-846 9040B: pH, Water							
pH	8.36	0.01	0.05	N/A	1	10/20/03	RK
EPA 160.1: Solids, Total Dissolve	d (TDS), Water						
Total dissolved solids	10600	360	1800	mg/L	40	10/20/03 15:30	SSJ
EPA 120.1: Specific Conductance	, Water						
Conductivity	16200	1	3	μ m hos/cm	1	10/20/03 14:15	SSJ
ASTM D-5057: Specific Gravity,	Water						
Specific Gravity	1.00		0.01	N/A	1	10/27/03 10:30	SSJ

U - Not detected above the MDL

B - Analyte detected in the associated Method Blank

S -Results outside normal recovery limits

J - Analyte detected below the PQL

E - Result is outside of quantitation range

R - RPD outside normal precision limits

^{* -} Result is greater than the associated action level

	1				Attachmen
FIELD: Natural Buttes	GL: 4819' KBE: 4833	Start Date: 05/29/03	Finsh Dat	e: 06/04/03	
WELL NAME: OIL GR 4G 40 8 22	TD: 5072' PBTD: 5020'	Current Well Status - DUMBING ON 18	/E) (
WELL NAME: OU - GB 1G 19- 8 - 22 Location:	20' Current Well Status: PUMPING OIL WELL Reason for Pull/Workover:				
	API 43-047-34696	INITIAL COMPLETION OF GREEN RIVE	R		
Uintah County, Utah					
Wellbore	'		***************************************		
Schematic		Tubing Landing Detail:			
Surface casing		Description	Size	Footage	Depth
Size: 9 5/8"		КВ		14.00	14.00
Weight:		TBG STRETCH		1.33	15.33
Grade: K - 55		151 - JTS J - 55 TBG	2 7/8"	4873.49	4888.82
Cemented		WEATHERFORD "T" ANCHOR	5 1/2"	2.65	4891.47
W/ 175 SXS Set @ 463'		1 - JT J - 55 TBG SEATING NIPPLE	2 7/8" 2 7/8"	<u>32.41</u> 1.10	<u>4923.88</u> 4924.98
Hole size: 12 1/4"		1 - JT J - 55 TBG	2 7/8"	32.20	4957.18
	_	PERFORATED TBG SUB	2 7/8"	4.09	4961.27
		TBG SUB	2 7/8"	6.10	4967.37
	TOC @ 4400!	TBG COLLAR	2 7/8"	0.44	4967.81
	TOC @ 1100'	EOT Tubing Information			4967.81
EXCLUDED PERFS	OPEN PERFS	Condition:			
		New: X Used:	Rerun:	_	
		Grade: J - 55	_		
		Weight (#/ft): 6.50#/ft			
		Sucker Rod Detail: Number Size	Deta	ils	
		POLISHEDROD 1 1/2" X 26'		NS AY METAL	
		75 7/8"	SLIC		
		121 3/4"	SLIC	K	
		Rod Information			
87		Condition:			
		New: X USED RERUN Grade: 78			
		Manufacture: NORRIS			
		<u></u>			
		Pump Information:			
		API Designation 2 1/2"	K 1 1/2" X 16'	X 19' X 21' RHA	<u>c</u>
		Pump SN#: #1415 Origina	I Run Date:	6/4/2003	
		RERUN NEW R		0/4/2000	
			**		
		ESP Well		ing Well	
		Cable Size:		IIPPLE	
		Pump Intake @ End of Pump @	PKR EOT	-	
		Wellhead Detail:	_ =	W.	
		7 1/16" 2000#			
		7 1/16" 3000#			
		7 1/16" 5000# X			
		Other: Landed on: Hanger Bonnet	х		
		SUMMARY			
	GREEN RIVER	04/30/03 06/04/03 CBL/VDL/CCL LOG W/	AS RAN FRO	M PBTD TO @	300' AND
	4914'-4920'	GREEN RIVER ZONE WAS SHOT AND F			
		BROKEN DOWN USING RIG PUMP AND			
		PKR WAS PULLED AND PRODUCTION	WAO KAN AS	STICKNIN WRON	-
		1.000000			
Production Casing					
Size: 5 1/2"				4000	
Weight: 15.50#/ft					
Grade: J - 55					
Cemented	DOTE -0				
W/ 455 SXS Set @ 5072' '	PBTD @ 5020' F/C @ 5029'				
Set @ 5072 Hole size: 7 7/8"	TD @ 5072'				
	_				
Prepared By:Todd Farley Pool # 824 D	ate: 06/04/03				

Attachment M

OU GB 1G 19-8-22 **Natural Buttes** 806' FNL & 698' FEL NE1/4NE1/4 S19-T8S-R22E **UINTAH COUNTY, UTAH**

API#:

43-047-34696

LEASE NUMBER:

UTU-65404

GL ELEVATION:

4819'

KB ELEVATION:

4834'

TD:

5075'

Original PBTD:

5029' FC

Current PBTD:

5020'

Spud Date:

Drill Rig Spud:

05/06/03

TD Date:

05/14/03 05/17/03

First Production:

06/05/03

CASING DETAIL:

121/4" Borehole

10 jts - 9^{5/8}", 36#, K-55 LT&C @ 463' KB

Cmtd w/ 175 sxs Prem Plus

7^{7/8}" Borehole

118 jts - 51/2", 151/2#, J-55 LT&C

Float Collar @ 5029', Shoe set @ 5072'

Cmtd w/ 330 sxs Hi-Fill Modified lead and 125 sxs 50/50 Pozmix tail.

TOC @ ~ 1100' by CBL

TUBING DETAIL:

See wellbore schematic

PERFORATION DETAIL:

Perf Depths Zone

Status

Stimulation/Acidize

4914' - 4920' Green River

open

Shot & pkr ran in well. Perfs were

broken down using rig pump.

OU GB 1G 19-8-22

Initial Completion -5/30/03 - 6/04/03

Ran CBL/VDL/GR log. Perf Green River Intervals 4914' – 4920'. Shot 4 jpf using 4" csg gun (24 holes). Swab. Set pkr @ 4888' & tested Green River Perfs 4914' – 4920'. More swabbing.

ONSICP: 0#, SITP: 100#. C/O PBTD @ 5020'. Land prod tbg w/ EOT @ 4968'. RIH w/ new pump, slick rods & polished rods.

PF for 6/14/03} 0 MCF, 12.7 BOPD, 70.9 BWPD, Tbg Pressure: 140#, Csg Pressure: 20#.

Date of First Production: 6/05/03

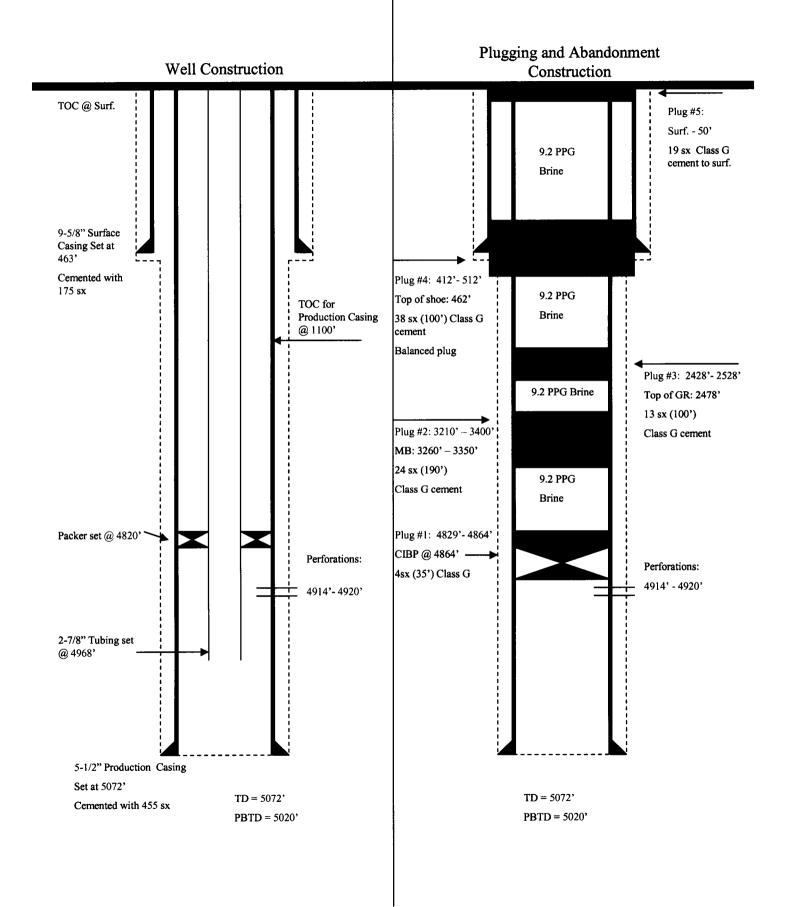
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

			וום		ASHINGTON, D	.C. 20460 DONMENT	DIAN							
WELL NAM	IE A NUMBER	FIELD NAME, LE				VALUE ADORE				EATOR				
OUGB 1G Glen Bend	-19-8-22	a limited transfering date				QEP Uinta Ba 11002 East 17 Vernal, Utah	sin, Inc. '500 South			<u> </u>				
	10 THE 10		STATE	* ************************************	COUNTY	****	A. 3			The same of the same				
Locate W	ell and Outline	Unit on	Utah		Uintah				API # 43-04	7-34696				
Section F	Plat - 640 Acres		SURFACE L	LOCATION DESCRI	PTION									
	N		1/4	4 of 1/4	of <u>NE</u> 1/4 o	f <u>NE</u> 1/4 of S	ection 19 7	ownship 85	Range _2:	<u>2E</u>				
		📥	LOCATE W	ELL IN TWO DIREC	TIONS FROM NEA	REST LINES OF QUAR	TER SECTION AND	DRILLING UNIT						
			Surface Location	806	ft. From (N/S)	North Line	of Quarter Sect	ion						
			And	And 698 ft. From (E/W) East Line of Quarter Section										
				TYPE O	F AUTHORIZA	ATION		WELL A	CTIVITY					
	<u>-</u>	<u> </u>					☐ Class I							
				✓ Individual	Permit		Hazar	dous						
							l —	zardous						
		<u> </u>		∐ Rule			☑ Class II	.24.4045						
				☐ Area Perm	it			Disposal						
							I —	carbon Storage	.					
			Number	of Wells		1		ced Recovery						
				0		·	☐ Class III	cco recovery						
			Lease Na	ame	Glen Bench U	nit	Well Number	OUGR 1G-19	-8 - 22					
	CASII	NG AND TUBIN	122.0 2.002 2.00	and a special series	ALCOHOLOGICA POR LONG CONTRACTOR				ENT OF CENT	ENT PLUGS				
	UASII	19 210 10001	O NEOD	1000	Locomo	HOLE SIZE	Error Senatus Provinciales acres de	and the state of t	And a second second second	gen gen om et staten.				
SIZE	WT (LB/FT)	TO BE PUT IN WE	LL (FT)	TO BE LEFT	F IN WELL (FT)	(INSIDE DIAMETER)			ice Method					
9 5/8"	36#	0,		4	63'	8.92		☑ The Dump	Bailer Method	l				
5 1/2"	15.5#	0,		50)72'	4.95		☐ The Two I	Plug Method					
OFMENS	TA DI VA AN	DADANDON D	ATA / -		l De la Comp			☐ Other	in					
		D ABANDON D	AIA	Plug # 1	Plug # 2	Pfug#3	Plug# 4		Plug #8 *	Trug w				
		/ill Be Placed (inches)		5 1/2"	5 1/2"	5 1/2"	9 5/8" 4968'	9 5/8"	 \	 \ 				
	n of Tubing or Drill Pip			4968'	4968'	4968'		4968'	+\	+				
	nt to be used (each p	lug)		4	24	13	38	19	 \ 	+				
	o be Pumped (cu. ft)			4.7	25.4	13.4	40.3 412'	20.01	 \ 	 \ 				
Calculated Top				4829'	3210'	2428'	412	•	 	+				
	of Plug (if tagged ft.)			40.4	16.4	16.4	16.4	16.4	 \	+				
Slurry Weight (I		(II)		16.4 Class "G"	16.4 Class "G"	Class "G"	Class "G"	Class "G"	 	$t \rightarrow t$				
	r Other Material (Clas	s III) N HOLE AND/O	D DEDE						VARIED I	anv)				
<u> </u>	From	H MOLE ANDIO	KFERE	To	FILENTO ME	Fro		75, 7716,6 576	То	##1 3 7				
	4914'		<u> </u>	4920'		,,,	····							
Estimated (Cost to Plug We	lls	<u> </u>											
\$18,000. (•													
				V- L	CERTIFICA	TION								
	all attachments I believe that th	he penalty of law and that, based on the information is tr an, including the p	on my inqu ue, accura	uiry of those inc ate, and comple	d am familiar wii dividuals immed ete. I am aware	th the information iately responsible that there are sig	for obtaining th	e information,						
~~~							W	e en la contraction de la contraction	a contract contract					
NAME AND OF	FICIAL TITLE (Pleas	se type or print)			SIGNATURE	•			OATE SIGHED	244 - CO 2 (1995) (\$ 988)				
Stephanie	L. Tomkinso	on, Regulatory	Affairs T	echnician	SAG	montes	wan		11/2	0/03				

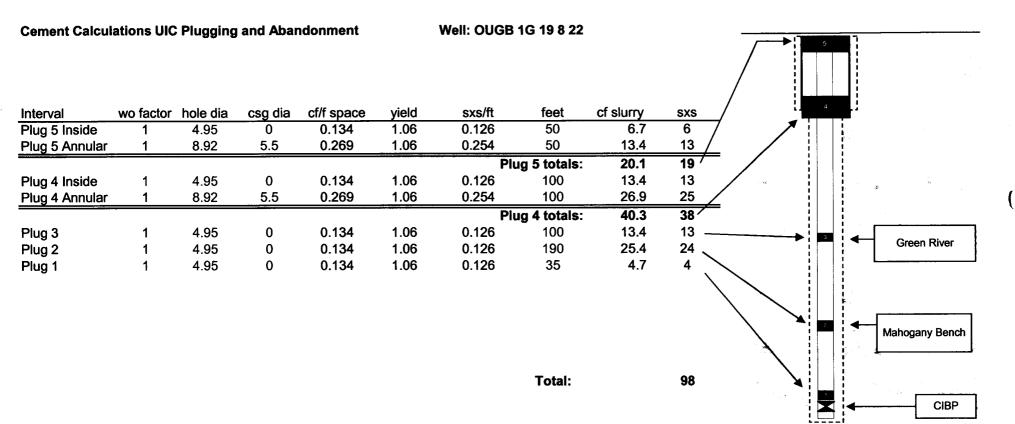
EPA Form 7520-14 (Rev. 8-01)

## OUGB 1G-19-8-22

# Attachment Q



Page 1



	Outside	Inside
Casing Size	Diameter	Diameter
9 5/8" =	9.63	8.92
5 1/2" =	5.5	4.95

# FIDELITY AND DEPOSIT COMPANY

HOME OFFICE

#### **OF MARYLAND**

BALTIMORE, MD 20203

#### **RIDER**

To be attached to and form a part of Underground Injection Control Bond No. 04127292
dated the 6 th day of December, 20 00 issued by the FIDELITY AND DEPOSIT COMPANY OF
MARYLAND, as Surety, on behalf of QEP Uinta Basin, Inc.
as Principal,
in the penal sum of Two Million Fifty-Two Thousand & No/100 Dollars (\$2,052,000.00
and in favor of U.S. Environmental Protection Agency
In consideration of the premium charged for the attached bond, it is hereby agreed that the attached bond be
amended as follows:
amended as follows:
<u>Add two wells: Well Name AD, 3-17-3C, API # 43-047-31556, Location SESE Section 17-T8S-R22E and Well Name OUGB, number 1G-19-8-22, API #43-047-34696, Location NENE Section 19-T8S-R22E</u>
This increases the bond amount to Two Million Eighty-Eight Thousand & No/100 Dollars (\$2,088,000.00).
Provided, However, that the attached bond shall be subject to all its agreements, limitations and conditions
except as herein expressly modified, and further that the liability of the Surety under the attached bond and the attached
bond as amended by this rider shall not be cumulative.
This rider shall become effective as of the 23 rd day of October 20 03.  Signed, sealed and dated this 23 rd day of October, 20 03.
QEP Uinta Basin, Inc. Principal
By: CS
C. B. Stanley President and CEO
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
By: Sada Klimp
Sandra J. Shryack / Attorney-in-Fact

# Power of Attorney FIDELITY AND DEPOSIT COMPANY OF MARYLAND COLONIAL AMERICAN CASUALTY AND SURETY COMPANY

KNOW ALL MEN BY THESE PRESENTS: That the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, and the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, corporations of the State of Maryland, by PAUL C. ROGERS, Vice President, and T. E. SMITH, Assistant Secretary, in pursuance of authority granted by Article VI, Section 2, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, does hereby nominate, constitute and appoint W. C. COHEN, B. Sect. T. POST, Richard K. STONE, Bret S. BURTON, Jana M. FORREST, Sandra J. SHRYACK, Faith R. DERHUNE, Tim H. HEFFEL and Erica M. PLUMMER, all of Wichita, Kansas, FACH its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surery, and as its act and all bonds and undertakings and the execution of such bonds on indertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office Baltamore, Md., in their own proper persons. This power of attorney revokes that issued on behalf of W. C. COHEN, JR, Scott T. POST, Richard K. STONE, Bret S. BURTON, Jana M. FORREST, Sandra J. SHRYACK, Emily R. TERHUNE, Tim H. HEFFEL, dated March 14, 2003.

The said Assistant Secretary does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article VI, Section 2, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President and Assistant Secretary have hereunto subscribed their names and affixed the Corporate Seals of the said FIDELITY AND DEPOSIT COMPANY OF MARYLAND, and the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, this 11th day of August, A.D. 2003.

ATTEST:

FIDELITY AND DEPOSIT COMPANY OF MARYLAND COLONIAL AMERICAN CASUALTY AND SURETY COMPANY



T. E. Smith

Assistant Secretary

Paul C. Rogers

Vice President

State of Maryland City of Baltimore

On this 11th day of August, A.D. 2003, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, came PAUL C. ROGERS, Vice President, and T. E. SMITH, Assistant Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, and the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and they each acknowledged the execution of the same, and being by me duly sworn, severally and each for himself deposeth and saith, that they are the said officers of the Companies aforesaid, and that the seals affixed to the preceding instrument is the Corporate Seals of said Companies, and that the said Corporate Seals and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Dennis R. Hayden

Notary Public

My Commission Expires: February 1, 2005

#### EXTRACT FROM BY-LAWS OF FIDELITY AND DEPOSIT COMPANY OF MARYLAND

"Article VI, Section 2. The Chairman of the Board, or the President, or any Executive Vice-President, or any of the Senior Vice-Presidents or Vice-Presidents specially authorized so to do by the Board of Directors or by the Executive Committee, shall have power, by and with the concurrence of the Secretary or any one of the Assistant Secretaries, to appoint Resident Vice-Presidents, Assistant Vice-Presidents and Attorneys-in-Fact as the business of the Company may require, or to authorize any person or persons to execute on behalf of the Company any bonds, undertaking, recognizances, stipulations, policies, contracts, agreements, deeds, and releases and assignments of judgements, decrees, mortgages and instruments in the nature of mortgages,...and to affix the seal of the Company thereto."

#### EXTRACT FROM BY-LAWS OF COLONIAL AMERICAN CASUALTY AND SURETY COMPANY

"Article VI, Section 2. The Chairman of the Board, or the President, or any Executive Vice-President, or any of the Senior Vice-Presidents or Vice-Presidents specially authorized so to do by the Board of Directors or by the Executive Committee, shall have power, by and with the concurrence of the Secretary or any one of the Assistant Secretaries, to appoint Resident Vice-Presidents, Assistant Vice-Presidents and Attorneys-in-Fact as the business of the Company may require, or to authorize any person or persons to execute on behalf of the Company any bonds, undertaking, recognizances, stipulations, policies, contracts, agreements, deeds, and releases and assignments of judgements, decrees, mortgages and instruments in the nature of mortgages,...and to affix the seal of the Company thereto."

#### CERTIFICATE

I, the undersigned, Assistant Secretary of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, and the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that the Vice-President who executed the said Power of Attorney was one of the additional Vice-Presidents specially authorized by the Board of Directors to appoint any Attorney-in-Fact as provided in Article VI, Section 2, of the respective By-Laws of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, and the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990 and of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed."

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies,

this <u>23,2</u>	day of _	Octor	 2003	
				Ad Soncher
				Assistant Secretary



#### THIS IMPORTANT DISCLOSURE NOTICE IS PART OF YOUR BOND

Fidelity and Deposit Company of Maryland, Colonial American Casualty and Surety Company, Zurich American Insurance Company, and American Guarantee and Liability Insurance Company are making the following informational disclosures in compliance with The Terrorism Risk Insurance Act of 2002. No action is required on your part.

#### Disclosure of Terrorism Premium

The premium charge for risk of loss resulting from acts of terrorism (as defined in the Act) under this bond is \$_waived__. This amount is reflected in the total premium for this bond.

#### Disclosure of Availability of Coverage for Terrorism Losses

As required by the Terrorism Risk Insurance Act of 2002, we have made available to you coverage for losses resulting from acts of terrorism (as defined in the Act) with terms, amounts, and limitations that do not differ materially as those for losses arising from events other than acts of terrorism.

#### Disclosure of Federal Share of Insurance Company's Terrorism Losses

The Terrorism Risk Insurance Act of 2002 establishes a mechanism by which the United States government will share in insurance company losses resulting from acts of terrorism (as defined in the Act) after a insurance company has paid losses in excess of an annual aggregate deductible. For 2002, the insurance company deductible is 1% of direct earned premium in the prior year; for 2003, 7% of direct earned premium in the prior year; for 2004, 10% of direct earned premium in the prior year; and for 2005, 15% of direct earned premium in the prior year. The federal share of an insurance company's losses above its deductible is 90%. In the event the United States government participates in losses, the United States government may direct insurance companies to collect a terrorism surcharge from policyholders. The Act does not currently provide for insurance industry or United States government participation in terrorism losses that exceed \$100 billion in any one calendar year.

#### **Definition of Act of Terrorism**

The Terrorism Risk Insurance Act defines "act of terrorism" as any act that is certified by the Secretary of the Treasury, in concurrence with the Secretary of State and the Attorney General of the United States:

- 1. to be an act of terrorism:
- 2. to be a violent act or an act that is dangerous to human life, property or infrastructure;
- 3. to have resulted in damage within the United States, or outside of the United States in the case of an air carrier (as defined in section 40102 of title 49, United 17 States Code) or a United States flag vessel (or a vessel based principally in the United States, on which United States income tax is paid and whose insurance coverage is subject to regulation in the United States), or the premises of a United States mission; and
- 4. to have been committed by an individual or individuals acting on behalf of any foreign person or foreign interest as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

But, no act shall be certified by the Secretary as an act of terrorism if the act is committed as part of the course of a war declared by Congress (except for workers' compensation) or property and casualty insurance losses resulting from the act, in the aggregate, do not exceed \$5,000,000.

These disclosures are informational only and do not modify your bond or affect your rights under the bond.

Copyright Zurich American Insurance Company 2003

# Division of Oil, Gas and Mining OPERATOR CHANGE WORKSHEET

	ROUTING	
	1. DJJ	
ı	2. CDW	

Change of Operator (Well Sold)	X - Operator Name Change/Merger									
The operator of the well(s) listed below has change	ged, effectiv	e:	1/1/2007							
FROM: (Old Operator):	11-1-1		TO: ( New Or	erator):						
N2460-QEP Uinta Basin, Inc.	N5085-Questar E&P Company									
1050 17th St, Suite 500			•	th St, Suite	•					
Denver, CO 80265				CO 80265						
Phone: 1 (303) 672-6900	****		Phone: 1 (303)	0/2-0900	OI DN DENG	NET TIBLE	r .			
CA No.			Unit:	I	GLEN BENC					
	SEC TWN	RNG		ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS			
SEE ATTACHED LISTS			*							
OPERATOR CHANGES DOCUMENT	ATION									
Enter date after each listed item is completed	AIION									
1. (R649-8-10) Sundry or legal documentation wa	s received fr	om the	FORMER one	rator on:	4/19/2007					
2. (R649-8-10) Sundry or legal documentation wa			=		4/16/2007	,				
3. The new company was checked on the <b>Depart</b> :			-				1/31/2005			
- · ·		mner ce		_	764611-0143					
4a. Is the new operator registered in the State of U			Business Numb	er:	704011-0143					
5a. (R649-9-2)Waste Management Plan has been re			IN PLACE							
5b. Inspections of LA PA state/fee well sites complete.			n/a	<u>-</u>						
5c. Reports current for Production/Disposition & S			n/a	_						
6. Federal and Indian Lease Wells: The BL	M and or the	e BIA ł	nas approved the	merger, na	me change,					
or operator change for all wells listed on Federa	al or Indian l	leases o	n:	BLM	4/23/2007	BIA				
7. Federal and Indian Units:										
The BLM or BIA has approved the successor	of unit oper	ator for	r wells listed on:		4/23/2007					
8. Federal and Indian Communization Ag	reements (	"CA"	):							
The BLM or BIA has approved the operator if	for all wells	listed w	rithin a CA on:			-				
9. Underground Injection Control ("UIC"	)	The Di	ivision has appro	oved UIC F	orm 5, Transfer	of Autho	ority to			
Inject, for the enhanced/secondary recovery un	it/project for	r the wa	ater disposal wel	ll(s) listed o	n:		_			
DATA ENTRY:										
1. Changes entered in the Oil and Gas Database	on:		4/30/2007 and	5/15/2007						
2. Changes have been entered on the Monthly Or	erator Cha	nge Sp	read Sheet on:		4/30/2007 and 5	5/15/2007	•			
3. Bond information entered in RBDMS on:			4/30/2007 and	5/15/2007						
4. Fee/State wells attached to bond in RBDMS on			4/30/2007 and	5/15/2007						
5. Injection Projects to new operator in RBDMS of			4/30/2007 and							
6. Receipt of Acceptance of Drilling Procedures f	or APD/Nev	v on:		n/a						
BOND VERIFICATION:										
1. Federal well(s) covered by Bond Number:			ESB000024	-						
2. Indian well(s) covered by Bond Number:	117 \ 11 .		799446	-	0.55002022					
3a. (R649-3-1) The <b>NEW</b> operator of any state/fe			-		965003033					
3b. The <b>FORMER</b> operator has requested a releas	-	from th	neir bond on:	n/a	•					
LEASE INTEREST OWNER NOTIFIC										
4. (R649-2-10) The NEW operator of the fee wells				-	om the Division					
of their responsibility to notify all interest owner	rs of this cha	inge on	:	n/a	•					
COMMENTS: THIS IS A COMPANY NAME OF	HANGE.									
SOME WELL NAMES HA		CHANC	SED AS REQU	IESTED						

Original Well Name	Well Name & No.	Q/Q	SEC	TWP	RNG	API	Entity	Lease	Well Type	Status
GB 8D-20-8-22	GB 8D-20-8-22	SENE	20	080S	220E	4304737665	15977	Federal	GW	DRL
WHITE RIVER U 16-9	WR 16-9	SWSE	09	080S	220E	4304715081	4915	Federal	OW	S
GLEN BENCH 31-30	GLEN BENCH 31-30	NWNE	30	080S	220E	4304731008	13727	Federal	OW	P
NGC 13-20	GB 13-20	NWSW	20	080S	220E	4304731355	13727	Federal	OW	P
GLEN BENCH FED 22-20	GB 22-20	SENW	20	080S	220E	4304731356		Federal	WI	A
FED 31-20	GB 31-20	NWNE	20	080S	220E	4304731433	13727	Federal	OW	P
ANTELOPE DRAW 2-17-4C	GB 2-17	SESW	17	080S	220E	4304731555	13727	Federal	OW	P
ANTELOPE DRAW 3-17-3C	GB 3-17	SESE	17	080S	220E	4304731556	13727	Federal	ow	S
GLEN BENCH 8-19	GB 8-19	SENE	19	080S	220E	4304732476	13727	Federal	OW	P
GLEN BENCH 4-30-8-22	GB 4-30-8-22	NWNW	30	080S	220E	4304732755	13727	Federal	OW	S
GLEN BENCH U 15-19-8-22	GB 15-19-8-22	SWSE	19	080S	220E	4304732756	13727	Federal	WI	A
OU GB 1G-19-8-22	OU GB 1G-19-8-22	NENE	19	080S	220E	4304734696	13727	Federal	OW	S
OU GB 2W-30-8-22	GB 2ML-30-8-22	NWNE	30	080S	220E	4304735080	14816	Federal	GW	P
GB 8ML-17-8-22	GB 8ML-17-8-22	SENE	17	080S	220E	4304737995		Federal	GW	APD
WHITE RIVER U 43-16	WR 43-16	NENW	16	080S	220E	4304731354	5170	State	OW	S
WHITE RIVER U 45-16	GB 45-16	NENE	16	080S	220E	4304731399	13727	State	OW	P
GLEN BENCH ST 6-16	GB 6-16	SENW	16	080S	220E	4304732549	13727		WI	A
GLEN BENCH ST 7-16	GB 7-16	SWNE	16	080S	220E	4304732582	13727		WI	A
GLEN BENCH ST 12-16	GB 12-16	NWSW	16	080S	220E	4304732583	13727	State	WI	A
GLEN BENCH U 11-16-8-22	GB 11-16-8-22	NESW	16	080S	220E	4304732857	13727		OW	P
GB 1MU-16-8-22	GB 1MU-16-8-22	NENE	16	080S	220E	4304734656	14251		GW	P
OU GB 7W-16-8-22	OU GB 7W-16-8-22	SWNE	16	080S	220E	4304734659	13747	State	GW	P

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL GAS AND MINING

		DIVISION OF OIL,	GAS AND M	ININ	G				SE DESIGNATION AND SERIAL NUMBER:
	SUNDRY	Y NOTICES AND	REPORT	s o	N WEL	LS		1	NDIAN, ALLOTTEE OR TRIBE NAME:
Do	not use this form for proposals to drill r	new wells, significantly deepen e	xisting wells below cu	rrent ba	ttom-hole dep	h, reenter p	olugged wells, or to		T or CA AGREEMENT NAME:
	YPE OF WELL		_	form for	such proposa	ls.			
		GAS WELL	OTHER_					see	attached
		N AND PRODUCT		۱V					
3. A	SUNDRY NOTICES AND REPORTS ON WELLS  SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to see attacched  7. IVIT' or CA AGREEMENT SEE attacched  1. TYPE OF WELL OIL WELL GAS WELL OTHER  2. NAME OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  3. ADDRESS OF OPERATOR:  QUESTAR EXPLORATION AND PRODUCTION COMPANY  4. LOCATION OF WELL  FOOTAGES AT SURFACE: attached  COUNTY: Uintah  QUESTAR EXPLORATION, TOWNSHIP, RANGE, MERIDIAN:  STATE:  UTA  11 CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATTYPE OF SUBMISSION  TYPE OF SUBMISSION  ACIDIZE	ELD AND POOL, OR WILDCAT:							
		Denver	STATE CO ZE	,802	65	(303)	308-3068		
		ed						COUN	ry: <b>Uintah</b>
C	TR/QTR, SECTION, TOWNSHIP, RAN	IGE, MERIDIAN:						STATE	: UTAH
11.	CHECK APP	ROPRIATE BOXES	TO INDICAT	E N.	ATURE	OF NO	TICE, REPO	RT. O	R OTHER DATA
								, , -	
Z	(Submit in Duplicate)	ALTER CASING			FRACTURE	-			REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL TEMPORARILY ABANDON
	1/1/2007	CHANGE TO PREVIOU	JS PLANS		OPERATOR	CHANGE			TUBING REPAIR
		CHANGE TUBING			PLUG AND A	BANDON			VENT OR FLARE
		CHANGE WELL NAME	!		PLUG BACK				WATER DISPOSAL
		CHANGE WELL STAT	us		PRODUCTIO	N (START/	RESUME)		WATER SHUT-OFF
	**************************************	COMMINGLE PRODUC	CING FORMATIONS		RECLAMATI	ON OF WE	LL SITE	Z	отнея: Operator Name
		CONVERT WELL TYPE	E		RECOMPLE	re - DIFFEI	RENT FORMATION		Change
Eff AN ch on Fe Ut: Fe Cu att	fective January 1, 2007 ID PRODUCTION COM ange of operator is invol the attached list. All op deral Bond Number: 96 ah State Bond Number: e Land Bond Number: irrent operator of record ached list.	operator of record, MPANY. This name lived. The same en perations will contine 65002976 (BLM Ref 965003033 965003033 I, QEP UINTA BASI ord, QUESTAR EXI	QEP Uinta Bachange Involution in ployees will due to be coverence No. E.  N, INC., here  Jay  PLORATION as described of Jay	asin, ves continued to SB0	Inc., will only an ir nue to be by bond r 00024) signs as PRODU e attache	hereaf iternal respondent operative country country country country country	ter be known corporate nar nsible for opers: for of the propers Vice Preside COMPANY,	as QI ne ch eration perties dent, C hereb	ange and no third party as of the properties described as described on the DEP Uinta Basin, Inc. by assumes all rights, duties
NAMI	E (PLEASE PRINT) Detra K. S	Stanberry	1		TITLE			latory	Affairs
SIGN	ATURE COMME	2) Hann	Derry		DATE	3/16	/2007		V Part of the date
his sp	pace for State use only)								

RECEIVED

APR 1 9 2007

#### FORM 9

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL GAS AND MINING

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: See attached
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME: see attached
1 TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER: See attached
2. NAME OF OPERATOR. QUESTAR EXPLORATION AND PRODUCTION COMPANY	9. API NUMBER: attached
3 ADDRESS OF OPERATOR: PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
1050 17th Street Suite 500 Denver STATE CO ZII. 80265 (303) 308-3068	
FOOTAGES AT SURFACE: attached	COUNTY: Uintah
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION  ACIDIZE  DEFPEN	
NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will start  1/1/2007  CHANGE TO PREVIOUS PLANS  OPERATOR CHANGE  PLUG AND ABANDON  CHANGE TUBING  CHANGE WELL NAME  CHANGE WELL STATUS  PRODUCTION (START/RESUME)  COMMINGLE PRODUCING FORMATIONS  RECLAMATION OF WELL SITE  CONVERT WELL TYPE  RECOMPLETE - DIFFERENT FORMATION  PER THE ATTACHED LIST OF WELLS, QUESTAR EXPLORATION AND PRODUCTION C INDIVIDUAL WELL NAMES BE UPDATED IN YOUR RECORDS.	
NAME (PLEASE PRINT)  Debra K. Stapberry  TITLE  Supervisor, Regula  SIGNATURE  4/17/2007	atory Affairs

RECEIVED
APR 1 9 2007



### United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155



IN REPLY REFER TO 3180 UT-922

April 23, 2007

Questar Exploration and Production Company 1050 17th Street, Suite 500 Denver, Colorado 80265

Re:

Glen Bench Enhanced Recovery Unit

Uintah County, Utah

#### Gentlemen:

On April 12, 2007, we received an indenture dated April 6, 2007, whereby QEP Uinta Basin, Inc. resigned as Unit Operator and Questar Exploration and Production Company was designated as Successor Unit Operator for the Glen Bench Enhanced Recovery Unit, Uintah County, Utah.

This indenture was executed by all required parties and the signatory parties have complied with Sections 5 and 6 of the unit agreement. The instrument is hereby approved effective April 23, 2007. In approving this designation, the Authorized Officer neither warrants nor certifies that the designated party has obtained all required approval that would entitle it to conduct operations under the Glen Bench Enhanced Recovery Unit Agreement.

Your nationwide oil and gas bond No. ESB000024 will be used to cover all federal operations within the Glen Bench Enhanced Recovery Unit.

It is requested that you notify all interested parties of the change in unit operator. Copies of the approved instruments are being distributed to the appropriate federal offices, with one copy returned herewith.

Sincerely,

/s/ Greg J. Noble

Greg J. Noble Acting Chief, Branch of Fluid Minerals

Enclosure

bcc:

Field Manager - Vernal (w/enclosure)

SITLA

Division of Oil, Gas & Mining

File - Glen Bench Enhanced Recovery Unit (w/enclosure)

Agr. Sec. Chron Reading File

Central Files

UT922:TAThompson:tt:4/23/07

FIREVED

APR 3 0 2007

DIV. OF OIL, GAS & MINING

### Division of Oil, Gas and Mining

### OPERATOR CHANGE WORKSHEET

(for state use only)

ROUTING
CDW

		•		• ,				
Change of Operator (Well Sold)				X -	Operator	Name Chan	ge	
The operator of the well(s) listed below has char	ıged,	effectiv	/e:		-	6/14/2010		
FROM: (Old Operator): N5085-Questar Exploration and Production Comp. 1050 17th St, Suite 500 Denver, CO 80265	any				Energy Comp 17th St, Suit	pany e 500	_	
Denver, CO 80203				Denve	er, CO 8026	5		
Phone: 1 (303) 308-3048				Phone: 1 (303	308-3048			
CA No.				Unit:	,	GLEN BENC	H ENH RI	EC
WELL NAME		TWN	RNG	API NO	ENTITY	LEASE TYPE		WELL
					NO		TYPE	STATUS
SEE ATTACHED		ļ						
	<u> </u>		<u> </u>	<u> </u>	<u> </u>			
ODED ATOD CHANCES DOCUMENT		ON						
OPERATOR CHANGES DOCUMENT Enter date after each listed item is completed	AII	.UN						
1. (R649-8-10) Sundry or legal documentation w	00 200	oivad f	th.	EODMED		C/28/2010		
2. (R649-8-10) Sundry or legal documentation w						6/28/2010		
				. ~		6/28/2010		C 10 1 10 0 1 0
<ul><li>3. The new company was checked on the <b>Depart</b></li><li>4a. Is the new operator registered in the State of I</li></ul>		or Con		Business Numb		764611-0143		6/24/2010
5a. (R649-9-2)Waste Management Plan has been re		ed on:		Requested	CI.	704011-0143	•	
5b. Inspections of LA PA state/fee well sites comp				n/a	_			
5c. Reports current for Production/Disposition & S				ok	_			
6. Federal and Indian Lease Wells: The Bl	LM an	nd or the	e BIA l	nas approved th	– e merger, na	me change,		
or operator change for all wells listed on Feder	al or	Indian 1	leases o	n:	BLM	8/16/2010	BIA	not yet
7. Federal and Indian Units:								
The BLM or BIA has approved the successo					<b>1</b> :	8/16/2010		
8. Federal and Indian Communization Ag	-		•	•				
The BLM or BIA has approved the operator						N/A		
9. Underground Injection Control ("UIC"							•	
Inject, for the enhanced/secondary recovery un	nit/pro	oject for	r the wa	ater disposal we	ell(s) listed o	n:	6/29/2010	-
DATA ENTRY:								
<ol> <li>Changes entered in the Oil and Gas Database</li> <li>Changes have been entered on the Monthly O</li> </ol>		or Cha	ngo Cn	6/30/2010	<del>-</del>	6/20/2010		
3. Bond information entered in RBDMS on:	регас	or Cha	inge op	6/30/2010	•	6/30/2010		
4. Fee/State wells attached to bond in RBDMS or	1:			6/30/2010	_			
5. Injection Projects to new operator in RBDMS				6/30/2010	<b>-</b>			
6. Receipt of Acceptance of Drilling Procedures	for AI	PD/Nev	v on:		n/a			
BOND VERIFICATION:								
1. Federal well(s) covered by Bond Number:				ESB000024	_			
<ul><li>2. Indian well(s) covered by Bond Number:</li><li>3a. (R649-3-1) The NEW operator of any state/fe</li></ul>		11(a) 1:a4		965010693		065010605		
· · · · · · · · · · · · · · · · · · ·						965010695		
3b. The <b>FORMER</b> operator has requested a release <b>LEASE INTEREST OWNER NOTIFIC</b>			irom th	neir bond on:	n/a	-		
4. (R649-2-10) The NEW operator of the fee wells			ntactad	and informadi	aria lattan <del>C</del> .	om the Division		
of their responsibility to notify all interest owne					by a letter ird n/a	om me Division		
COMMENTS:				<del>.</del>	ID CL		· · · ·	

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER See attached SUNDRY NOTICES AND REPORTS ON WELLS 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: See attached Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 7. UNIT or CA AGREEMENT NAME: See attached 1 TYPE OF WELL 8. WELL NAME and NUMBER: OIL WELL GAS WELL OTHER See attached 2 NAME OF OPERATOR: 9. API NUMBER: Questar Exploration and Production Company Attached 3. ADDRESS OF OPERATOR: 10. FIELD AND POOL, OR WILDCAT: PHONE NUMBER: 1050 17th Street, Suite 500 Denver CO .80265 (303) 672-6900 See attached 4. LOCATION OF WELL FOOTAGES AT SURFACE: See attached COUNTY: Attached QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: STATE: **UTAH** CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11 TYPE OF SUBMISSION TYPE OF ACTION ACIDIZE DEEPEN 1 NOTICE OF INTENT REPERFORATE CURRENT FORMATION (Submit in Duplicate) ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL Approximate date work will start CASING REPAIR **NEW CONSTRUCTION** TEMPORARILY ABANDON 6/14/2010 CHANGE TO PREVIOUS PLANS OPERATOR CHANGE TUBING REPAIR CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSAL (Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion: COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE OTHER: Operator Name CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION Change 12 DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Effective June 14, 2010 Questar Exploration and Production Company changed its name to QEP Energy Company. This name change involves only an internal corporate name change and no third party change of operator is involved. The same employees will continue to be responsible for operations of the properties described on the attached list. All operations will continue to be covered by bond numbers: N3700 Federal Bond Number: 965002976 (BLM Reference No. ESB000024) Utah State Bond Number: 965003033  $\rightarrow 965010695$  Fee Land Bond Number: 965003033BIA Bond Number: 799446 9650/0693 The attached document is an all inclusive list of the wells operated by Questar Exploration and Production Company. As of June 14, 2010 QEP Energy Company assumes all rights, duties and obligations as operator of the properties as described on the list Morgan Anderson NAME (PLEASE PRINT Regulatory Affairs Analyst 6/23/2010 DATE (This space for State use only)

(5/2000)

JUN 2 8 2010

e Side)

Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

# Questar Exploration Production Company (N5085) to QEP Energy Company (N3700) GLEN BENCH ENH REC effective June 14, 2010

well_name	sec	twp	rng	api	entity	mineral lease	type	stat	C
GLEN BENCH 31-30	30	080S	220E	4304731008	13727	Federal	OW	P	+
WR 43-16	16	080S		4304731354	5170	State	OW	P	<del>-</del>
GB 13-20	20	080S	220E	4304731355	13727	Federal	OW	S	+
GB 45-16	16	080S	220E	4304731399	13727	State	OW	P	+
GB 31-20	20	080S	220E	4304731433	13727	Federal	OW	P	-
GB 2-17	17	080S	220E	4304731555	13727	Federal	OW	P	
GB 3-17	17	080S	220E	4304731556	13727	Federal	OW	TA	
GB 8-19	19	080S	220E	4304732476	13727	Federal	OW	P	1
GB 4-30-8-22	30	080S	220E	4304732755	13727	Federal	OW	S	1
GB 11-16-8-22	16	080S	220E	4304732857	13727	State	OW	P	
GB 1MU-16-8-22	16	080S	220E	4304734656	14251	State	GW	P	-
OU GB 7W-16-8-22	16	080S	220E	4304734659	13747	State	GW	P	
OU GB 1G-19-8-22	19	080S	220E	4304734696	13727	Federal	OW	P	Ť
GB 2ML-30-8-22	30	080S	220E	4304735080	14816	Federal	GW	P	
GB 8D-20-8-22	. 20	080S		4304737665	15977	Federal	GW	P	
GB 13AML-17-8-22	17	080S	220E	4304739227		Federal	GW	APD	C
GB 4DML-20-8-22	20	080S		4304739228		Federal	GW	APD	C
GB 12DML-20-8-22	20	080S		4304739229		Federal	GW	APD	C
GB 16BML-19-8-22	19	080S		4304739233		Federal	GW	APD	C

Bonds: BLM = ESB000024 BIA = 956010693 State = 965010695



## **United States Department of the Interior**



#### BUREAU OF LAND MANAGEMENT Utah State Office P.O. Box 45155 Salt Lake City, UT 84145-0155 http://www.blm.gov/ut/st/en.html

IN REPLY REFER TO: 3100 (UT-922)

JUL 2 8 2010

Memorandum

To:

Vernal Field Office, Price Field Office, Moab Field Office Roja L Bankut

From:

Chief, Branch of Minerals

Subject:

Name Change Recognized

Attached is a copy of the Certificate of Name Change issued by the Texas Secretary of State and a decision letter recognizing the name change from the Eastern States Office. We have updated our records to reflect the name change in the attached list of leases.

The name change from Questar Exploration and Production Company into QEP Energy Company is effective June 8, 2010.

cc:

MMS

**UDOGM** 

AUG 1.6 2019

DIV. OF OIL, GAS windows